BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY COMMISSION

In	the	Mat	ter	of:		
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CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, OCTOBER 31, 2012 9:08 A.M.

Reported by: Kent Odell

Commissioners Present

Robert B. Weisenmiller, Chairperson Karen Douglas Andrew McAllister Carla Peterman

Staff Present:

Rob Oglesby, Executive Director Michael Levy, Chief Counsel Harriet Kallemeyn, Secretariat

	Agenda Item
Laurie ten Hope	3
Erik Stokes	3
Pam Doughman	3
Allan Ward	3
Blake Roberts	8

Also Present

Interested Parties (* Via WebEx)

Louis Blumberg, The Nature Conservancy
Jim Blatchford, California ISO
Bob Raymer, Building Industry Assoc.
Blair Swezey, SunPower
Bryan Early, CALSTART
Rhea Williamson, Humboldt State University
Connie Stewart, Humboldt State University
Dan Chia, SolarCity
Valerie Winn, PG&E
*Peter Miller, NRDC
*Steve Zoretti, Solar Energy Industries Association
*Colleen Quinn, ChargePoint
*Fred Bauman, Center for the Built Environment
*Eileen Anderson, Center for Biological Diversity

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- 2 OCTOBER 31, 2012 9:08 a.m.
- 3 CHAIRPERSON WEISENMILLER: Good morning. Let's
- 4 start the Business Meeting with the Pledge of Allegiance.
- 5 (Whereupon, the Pledge of Allegiance was
- 6 recited in unison.)
- 7 CHAIRPERSON WEISENMILLER: Okay. I think
- 8 actually the best thing is to start the meeting with just a
- 9 moment of silence for victims in New York, from Hurricane
- 10 Sandy.
- 11 Obviously, as one of the agencies responsible in
- 12 the State of contingency planning and, certainly, the
- 13 liability, it certainly brings to mind our awesome
- 14 responsibilities.
- 15 (Moment of Silence.)
- 16 CHAIRPERSON WEISENMILLER: Anyone else want to
- 17 say anything?
- 18 COMMISSIONER DOUGLAS: You know, I'll just say,
- 19 briefly I -- thank you for bringing that up and starting
- 20 the Business Meeting that way.
- 21 And I will note that there's a small amount of
- 22 ARRA funding that went to technical assistance for local
- 23 governments to do energy planning and contingency planning
- 24 for energy emergencies. It's a really good program and
- 25 there are a number of local governments now working with

- 1 each other, and working with us, and the technical
- 2 consultant that we've brought on board to help bring some
- 3 additional expertise and contingency planning.
- 4 And so they're doing things like identifying, you
- 5 know, how much fuel supply, and where the fuel supply is in
- 6 the region.
- 7 They're also looking at what buildings they would
- 8 want to use as shelters, for example, or hospitals. Or,
- 9 you know, what buildings they would want to keep online and
- 10 powered up for an outage of a certain period of time. It
- 11 could be 24 hours, or 48, or 72.
- 12 And so that also brings in our energy efficiency
- 13 and demand response because once you identify, for example,
- 14 you know, 20 or 50 buildings in a county that really need
- 15 to have power that then raises the question of, well, how
- 16 much power do they need? And is it for a portion of the
- 17 buildings? Is it for a portion of the functions? Can that
- 18 be provided through distributed generation? Can we make
- 19 those buildings as efficient as possible so they can be
- 20 powered as inexpensively as possible?
- 21 And it also, of course, brings in some of the
- 22 fleet issues as well. So, for example, now much of the
- 23 fleet would have access to power, maybe fuel, what kinds of
- 24 fuel might be available. And if there are electric
- 25 vehicles, are there PV or other ways of charging them?

- 1 So, it's -- there is some interesting work going
- 2 on. It's very important, as we see. So, I look forward to
- 3 continuing that and thanks for bringing that up.
- 4 COMMISSIONER MC ALLISTER: So, just what's going
- 5 on in the massive outages is -- we've been having a lot of
- 6 conversations, actually, in the last few days about this.
- 7 But, you know, it just highlights how related all
- 8 the issue, many of the issues, most of the issues that we
- 9 deal with at the Commission actually are.
- 10 You know, different parts of the State have
- 11 different possible emergency scenarios. There are lots of
- 12 different scenarios.
- In Southern California fire is a big, is a
- 14 central kind of organizing principle for how to do
- 15 planning.
- And the First Responder network is a pretty key
- 17 one for this discussion, the local governments and how
- 18 they're going to support their First Responders?
- 19 Those sites, that Commissioner Douglas referred
- 20 to, can they serve as staging sites for the First
- 21 Responders?
- You know, picking out, in San Diego, L.A.,
- 23 picking out the areas that tend to be on the margins nearby
- 24 the fire prone areas is really important for that planning.
- 25 And so at the same time, if we make investments

- 1 to bolster our emergency response efforts, those
- 2 investments, actually, can have a big upside just in the
- 3 day-to-day operations of those buildings.
- 4 As Commissioner Douglas referred to, energy
- 5 efficiency, obviously, is super important. But it also can
- 6 enable, if it's coupled with storage, you know, an island-
- 7 able system can provide good benefits the 99.9 percent of
- 8 the time when it's not being used for an emergency.
- 9 And I think in the demand response arena, in the
- 10 reliability arena, and in just the optimization of the
- 11 grid, generally, those investments can have a big upside.
- 12 And so part of the challenges ahead of us include
- 13 getting a handle on the economics of that, getting a handle
- 14 on what the really implies as far as our communications
- 15 capabilities and leveraging what we all know of as the
- 16 Smart Grid.
- 17 So, I think there are just a lot of interesting
- 18 questions that are brought up by this that have a lot of
- 19 different upsides that complement each other quite well.
- 20 COMMISSIONER PETERMAN: Yeah, Chairman, thank you
- 21 for bringing up the situation on the East Coast and our
- 22 thoughts and prayers are with everyone there, and my fellow
- 23 Commissioners for your comments.
- 24 I'm from New Jersey and that's -- New Jersey and
- 25 New York is where all my family still lives, and so been in

- 1 constant -- trying to be in constant communication with
- 2 them.
- And, you know, what's really been salient to me
- 4 is the lack of information you have when you're actually on
- 5 the ground because the phone connections are spotty, they
- 6 don't have cable, they don't -- their power's in and out.
- 7 And so many times my mother was asking me for
- 8 reports about what things looked like around the State.
- 9 And again, it just speaks to the importance of doing
- 10 emergency planning.
- 11 You know, most important for them right now are
- 12 that the utility workers are out there trying to restore
- 13 power, they're First Responders. And again, it speaks to
- 14 the need for a well-trained utility workforce, as well as
- 15 the importance of continuing to maintain and invest in our
- 16 infrastructure.
- 17 And again, I look forward -- you know, perhaps
- 18 more of the silver lining is that as folks rebuild their
- 19 homes and their buildings that they'll be able to build
- 20 them in a more energy efficient and resilient manner.
- 21 CHAIRPERSON WEISENMILLER: Great. I'll close
- 22 with two comments. One is that Valerie pointed out to me
- 23 that PG&E has employees going back to the East Coast. I
- 24 think 65 percent of New Jersey is without power, now. So,
- 25 anyway, they're flying back to help.

- 1 I'd also say in the first Brown administration
- 2 Rusty Schweikert, before he became chair, started as the
- 3 Governor's science and technology advisor. And one of the
- 4 things he convinced the Governor was that the
- 5 administration had to worry about earthquakes. You know,
- 6 that if you look at the longer term in California that's
- 7 inevitable that it's going to happen.
- 8 And, you know, it may happen in that
- 9 administration or not, but it will happen.
- 10 And so, actually, the Governor launched a number
- 11 of initiatives that ultimately turned out to be very
- 12 useful, you know, in '89 and other things. But again, it's
- 13 certainly a reminder that over the long term we know what's
- 14 going to happen, and the difficulties in finding the money
- 15 and time to deal with the inevitable.
- And so with that, in terms of the Business
- 17 Meeting it's relatively short. Item 2 will be held for a
- 18 future meeting.
- 19 So, let's go to the Consent Calendar.
- 20 COMMISSIONER DOUGLAS: Move the Consent Calendar.
- 21 COMMISSIONER MC ALLISTER: I'll second.
- 22 CHAIRPERSON WEISENMILLER: All those in favor?
- 23 (Ayes.)
- 24 CHAIRPERSON WEISENMILLER: The Consent Calendar
- 25 passes unanimously.

1	So, let's go to Item 3, EPIC, Electric Program
2	Investment Charge Triennial Investment Plan and possible
3	approval of the staff final report as a Commission report
4	for submittal to the PUC.
5	Laurie, do you want to start the presentation?
6	MS. TEN HOPE: Good morning. I'm Laurie ten
7	Hope, Deputy Director of the Commission's Energy Research
8	and Development Division, and I'll be joined by my
9	colleagues Pam Doughman and Erik Stokes to present an
10	overview of the staff's Electric Program Investment Charge
11	first Triennial Investment Plan.
12	Just about a year ago, at the Governor's urging,
13	the CPUC opened a proceeding that resulted in the
14	establishment of the Electric Program Investment Charge,
15	referred to as EPIC. And in May 2012 the CPUC issued a
16	decision that outlined the scope and structure for EPIC.
17	The decision identified four administrators, the
18	Energy Commission, Pacific Gas & Electric, Southern
19	California Edison, and San Diego Gas & Electric.
20	We kicked off the development of the Commission's
21	Investment Plan with a series of public workshops seeking
22	broad participation to shape the plan. We held five days

- of workshops in both Northern and Southern California and 23
- received a robust set of over 200 written comments. 24
- That participation was really valuable to us and 25

- 1 has helped shape the Investment Plan that's before you
- 2 today.
- 3 That brings us to today's Business Meeting to
- 4 consider adoption of the staff final Investment Plan.
- 5 After today, the next steps include submitting
- 6 the approved version of the Investment Plan to the CPUC on
- 7 November 1st, tomorrow.
- 8 The CPUC is expected to open a proceeding in
- 9 December to consider the four administrator's Investment
- 10 Plans and issue a decision in May 2013.
- When developing the Investment Plan staff
- 12 analyzed the innovative technologies and strategies that
- 13 would deliver value to the ratepayers in the context of the
- 14 State energy goals.
- 15 As you well know, our energy goals include
- 16 aggressive building and appliance efficiency standards and
- 17 targets for zero net energy buildings.
- They include 33 percent renewables and 12,000
- 19 megawatts of that is distributed generation, also 6,500
- 20 megawatts of CHP and electrification of the transportation
- 21 system.
- Delivering value to ratepayers, while achieving
- 23 these goals, is possible but not without challenges.
- 24 On the left side of this slide is a simplified
- 25 schematic of our current power system, with customers

- 1 basically as the receivers of power.
- 2 On the right side of the slide is a schematic of
- 3 our emerging power system showing more complexity with both
- 4 fossil and renewable generators of various sizes and
- 5 attributes located at homes, businesses and power parks.
- 6 Some sources are base load and easy to integrate and others
- 7 are intermittent and depend on when the sun shines, or the
- 8 wind blows, and customers are beginning to add electric
- 9 vehicles to the mix.
- 10 Innovation is needed to accommodate and encourage
- 11 this transformation through lower cost and higher value
- 12 solutions for ratepayers.
- 13 And as the Commissioners noted this morning, our
- 14 system is very interconnected, we also need to do that in a
- 15 highly reliable way, which creates new challenges as the
- 16 power system becomes more complex, less visible to
- 17 operators, and has much more customer diversity of choice,
- 18 but the complexity that accompanies that.
- 19 Not all of these technology solutions are yet
- 20 commercialized and others are inadequate or expensive.
- 21 The mission of this Investment Plan is to invest
- 22 in new technologies that fill the critical gaps within the
- 23 innovation pipeline.
- 24 The CPUC decision established the parameters of
- 25 the program, including the budget and the eligibility

- 1 criteria in each stage of the innovation pipeline, shown on
- 2 this slide.
- 3 An overview of the proposed initiatives will be
- 4 outlined shortly by Pam and Erik. The initiatives will
- 5 highlight what will be funded in the Investment Plan, but
- 6 also covered in the plan is how we propose to carry out the
- 7 EPIC program.
- 8 An important attribute of how the program will be
- 9 administered is to do it efficiently, without duplication.
- 10 To that end, the staff of the four administrators have
- 11 agreed to the following principles.
- 12 The administrators will share information to
- 13 maximize the efficient use of the funds.
- 14 The administrators will work together to avoid
- 15 duplication of efforts.
- 16 The administrators will establish consistent and
- 17 common evaluation measurement and verification protocols.
- And perhaps more importantly, the administrators
- 19 will continue working together to solicit and respond to
- 20 advice from stakeholders.
- 21 And finally, the EPIC administrators will work
- 22 together to facilitate the dissemination of EPIC-funded
- 23 RD&D results.
- 24 Additional program administration attributes that
- 25 are articulated in the plan include an IOU ratepayer

- 1 benefit assessment that's built into all phases of the
- 2 program administration, including solicitation planning,
- 3 agreement development, project management and project close
- 4 out.
- 5 The plan also includes a detailed and transparent
- 6 solicitation process, so both the CPUC and potential
- 7 researchers know what the implementation process would be
- 8 for the program and make it easier for their participation.
- 9 And the plan includes processes to coordinate
- 10 with other research entities, provide effective project
- 11 management, and share results through technology forums, a
- 12 web portal, and other channels.
- 13 Slide 7 identifies the project eligibility
- 14 criteria for projects in various phases of development.
- 15 The first column on applied research has a
- 16 recommended three-year funding level of \$158.7 million and
- 17 an estimated minimum and maximum award per recipient
- 18 between \$250,000 and \$3 million.
- 19 The middle column, for technology demonstration
- 20 and deployment, proposes a three-year funding total of
- 21 \$129.8 million, including a \$27 million set aside for
- 22 bioenergy that was established in the CPUC decision.
- 23 The funding range here is slightly larger, these
- 24 projects tend to be larger and closer to commercialization,
- 25 with a \$1 million to \$5 million award range anticipated.

- 1 And the third column, for market facilitation,
- 2 proposes a three-year total of \$43.3 million, and a wide
- 3 range of projects because of the diversity of the
- 4 initiatives in this area, ranging between \$25,000 to \$3
- 5 million.
- 6 For match funding requirements, we would set a
- 7 requirement that in the technology demonstration and
- 8 deployment projects a minimum of 20 percent would need to
- 9 be brought to the table by the project proponent.
- 10 And in the other two areas additional credit
- 11 would be provided in the solicitation, but not specified as
- 12 a pass/fail requirement.
- 13 And importantly, we've set aside up to 10 percent
- 14 of the applied research and technology demonstration to
- 15 attract Federal cost share into California.
- I want to go through just a few of the changes
- 17 that were made between the staff draft Investment Plan and
- 18 the final staff Investment Plan.
- 19 Several changes were made based on stakeholder
- 20 input and we've summarized them in a glossary that's
- 21 available in the back of the hearing room, as well as on
- 22 the web.
- 23 Staff added a vision for the electricity system
- 24 for 2020 and established a framework for the selection of
- 25 the proposed initiatives.

1	Substantial				~	- 1	
	Substantiat	geraii	was	added	()ri	1 110	proposed

- 2 competitive process, including a sample program opportunity
- 3 notice.
- 4 And changes were made to add, drop or consolidate
- 5 initiatives based on the input from stakeholders.
- 6 Staff deleted the Graywater Research Initiative
- 7 until a more detailed water energy research road map is
- 8 completed.
- 9 We revised the Electric Transportation
- 10 Initiatives. Improve efficiency of electric transportation
- 11 was removed and R&D on wireless charging was added.
- 12 We revised the Smart Grid Initiatives based on
- 13 discussions on planned IOU initiatives and added
- 14 exploration of strategies to improve ramping of natural gas
- 15 plants to support renewable integration.
- 16 Also, in the market facilitation area stakeholder
- 17 comments suggested that a workforce needs assessment had
- 18 already been completed recently and a new assessment would
- 19 not be needed, so this initiative was dropped from the
- 20 proposed plan.
- 21 And lastly, stakeholder comments suggested that
- 22 the job listing portion of the EPIC web portal would
- 23 duplicate work already done by other State agencies.
- 24 So, instead of doing the job section of the web
- 25 portal, we'll link to other agencies that have already

- 1 provided this function.
- 2 Since the staff final was posted on October 23rd
- 3 we have received additional comments and made a few changes
- 4 in an errata and staff seeks Energy Commission adoption of
- 5 the staff final plan as changed by this errata.
- A notice of the errata was prepared by staff,
- 7 posted on the Commission website and distributed to
- 8 individuals on the Commission's EPIC list serve.
- 9 The notice identifies proposed changes in the
- 10 Investment Plan by reference to the Plan's section and page
- 11 number, and shows the actual change in text.
- 12 Changes include clarifying text to indicate that
- 13 the proposed initiatives represent the full scope of
- 14 possible awards, but the Energy Commission may not make
- 15 awards in every single initiative area depending on funding
- 16 and priorities.
- 17 The errata also clarifies that initiatives are
- 18 not listed in order of importance.
- 19 The errata includes a summary of staff responses
- 20 and comments received after the publication of the staff
- 21 final report. This summary is provided in Appendix F of
- 22 the Investment Plan.
- 23 In addition, the errata corrects inconsistencies
- 24 and grammatical, typographical and formatting errors.
- 25 Copies of the errata and Appendix F are also in

- 1 the back of the hearing room and posted on the webpage for
- 2 EPIC documents.
- 3 And my final slide, the proposed Energy
- 4 Commission EPIC budget includes the amounts to be collected
- 5 in the three-year period as established in the CPUC EPIC
- 6 Phase 1 and Phase 2 decisions.
- 7 For the 2012 to 2014 period the total to be
- 8 collected for the Energy Commission portion of the EPIC
- 9 program is approximately \$269 million.
- I went through these dollar amounts in each of
- 11 the topic areas before, so I won't read them again.
- 12 It also includes up to 10 percent for program
- 13 administration of the EPIC program for applied research and
- 14 development, technology demonstration and deployment, and
- 15 market facilitation.
- 16 Those totals were basically the same funding
- 17 levels that were identified in the CPUC decision.
- The phase 2 CPUC decision also indicated support
- 19 for using \$25 million per year of additional EPIC funds for
- 20 the New Solar Home Partnership Program, but could not
- 21 authorize EPIC funds for this purpose because of provisions
- 22 in the Public Utilities Code limits funding that could be
- 23 used to support NSHP.
- 24 The Phase 2 decision encouraged the Legislature
- 25 to change existing law and in June 2012, through Senate

- 1 Bill 1018, the Legislature amended Section 2851(e) to allow
- 2 EPIC funds to be used for NSHP.
- 3 Consequently, the staff EPIC Investment Plan
- 4 proposed the collection of \$25 million in 2013 and 2014 for
- 5 this valuable program. Up to 10 percent of these funds may
- 6 be used for administration of NHSP.
- 7 Next, I'd like to introduce the co-leads for the
- 8 development of the Investment Plan, Erik Stokes and Pam
- 9 Doughman. They'll present the investment initiatives of
- 10 the plan, which is really the meat of the plan.
- 11 But before turning over the podium, I want to
- 12 thank each of the members of the team who are seated here,
- 13 Gary O'Neill, Sherrill Neidich, Beth Chambers, Jamie
- 14 Patterson, Joe O'Hagan, Michael Sokol, and Silas Bauer.
- 15 Erik.
- MR. STOKES: Okay, the Investment Plan outlines a
- 17 series of strategic objectives and associated funding
- 18 initiatives that detail the EPIC investments for this
- 19 three-year period.
- 20 In developing and shaping the funding
- 21 initiatives, staff utilized a number of resources. First
- 22 and foremost was the many stakeholders that provided input
- 23 throughout this process.
- 24 In addition to stakeholder input, staff based the
- 25 proposed funding initiatives on a number of other

- 1 resources, including current knowledge of clean energy
- 2 technologies, barriers and gaps identified in research road
- 3 maps, and key factors identified in key State policy and
- 4 planning documents, such as the Integrated Energy Policy
- 5 Report.
- 6 These resources helped ensure EPIC investments
- 7 address critical funding gaps, build off the state of the
- 8 art, and advance clean energy technologies that provide
- 9 benefits to IOU ratepayers.
- 10 Early in the presentation Laurie talked about the
- 11 innovation pipeline and how EPIC funds will be used to
- 12 address critical funding gaps within this pipeline.
- 13 The first funding gap is often referred to as the
- 14 technological value of debt. Investments in the applied
- 15 research and development program area will help new
- 16 innovations overcome this technological value of debt.
- 17 The funding allocations are based on the loading
- 18 order, with efficiency and demand response receiving almost
- 19 \$65 million, followed by clean generation with \$44 million
- 20 and, finally, Smart Grid with \$23 million.
- In addition, the applied R&D area has a line item
- 22 for innovation clusters. Investments in this area will
- 23 pursue strategies to help early stage energy companies
- 24 overcome some of the early and common obstacles they face
- 25 in turning their lab-scale innovations into successful

- 1 businesses.
- 2 The next few slides will provide more detail on
- 3 the applied R&D investments.
- 4 Under energy efficiency and demand response EPIC
- 5 investments will develop new technologies and approaches
- 6 that reduce energy consumption and peak load demand. This
- 7 includes developing more efficient components and systems
- 8 for high electricity uses, such as lighting, HVAC systems,
- 9 and plug load devices.
- In addition, research in this area will develop
- 11 and pilot novel integrated building approaches that will be
- 12 needed to achieve the State's goals for zero net energy
- 13 buildings and whole building retrofits.
- 14 To further enable customer side of the meter
- 15 energy choices, research will also advance communication
- 16 systems, market mechanisms and aggregation strategies that
- 17 allow customers greater control over their energy cost and
- 18 enable customers with distributed energy resources, such as
- 19 demand response, to participate in energy markets.
- 20 For clean generation, EPIC investments will
- 21 develop technologies, tools and strategies that can
- 22 significantly increase the market penetration of high
- 23 potential distributed generation resources, improve the
- 24 performance and cost effectiveness of utility scale
- 25 renewables, and investigate the barriers to offshore

- 1 resources.
- In addition, research will provide the tools and
- 3 information to help decision makers understand the
- 4 environmental costs and benefits of both conventional and
- 5 emerging generation technologies.
- 6 Okay, on slide 14 here we have four strategic
- 7 objectives for Smart Grid-enabling clean energy. To create
- 8 a reliable, efficient, and flexible Smart Grid EPIC
- 9 investments will develop advanced grid communication
- 10 systems, grid planning models and operational tools, and
- 11 grid level storage that can provide automated real-time
- 12 management of grid resources, enable bidirectional power
- 13 flows, and integrate high penetration levels of both
- 14 intermittent renewables and distributed generation into the
- 15 grid.
- 16 An emerging technology that can further enable
- 17 the Smart Grid is plug-in electric vehicles. These
- 18 vehicles offer a number of benefits over conventional
- 19 vehicles including lower fueling costs and reduced air
- 20 emissions.
- 21 Research in this area will explore strategies to
- 22 reduce the cost of these vehicles by optimizing their
- 23 potential as a strategic technology to improve the
- 24 operation of the grid.
- 25 This includes research topics such as vehicle-to-

- 1 grid research, and also looking at ways to reuse EV
- 2 batteries and storage devices after they're no longer
- 3 suitable for vehicle applications.
- 4 Under the cross-cutting section we have a
- 5 strategic objective of innovation clusters. EPIC funds
- 6 will leverage the resources of California's clean
- 7 organization groups and technology incubator facilities to
- 8 advance early stage technologies, and better connect these
- 9 technologies with regional market needs and private
- 10 investors.
- 11 Investments in the applied R&D program area are
- 12 aimed at helping new innovations overcome the technological
- 13 value of debt.
- 14 Investments in the technology demonstration and
- 15 deployment area will address the second critical funding
- 16 gap in the innovation pipeline, which is often referred to
- 17 as the commercialization value of debt.
- 18 Approximately \$37 million over this three-year
- 19 period will provide funding to demonstrate emerging
- 20 efficiency technologies and integrated demand side
- 21 management approaches in real world settings.
- These demonstrations will provide proven
- 23 technical and economic data that could facilitate their
- 24 successful deployment into the marketplace or make these
- 25 technologies eligible for IOU energy efficiency rebate

- 1 programs.
- 2 For the second line item in the table, EPIC
- 3 investments will provide \$48 million to demonstrate the
- 4 scale up of emerging bioenergy and combined heat and power
- 5 technologies, as well as the technologies that can help
- 6 facilitate the integration of intermittent renewables into
- 7 the grid.
- Finally, the EPIC investments will demonstrate
- 9 different models of energy-smart communities that integrate
- 10 numerous clean energy technologies. These energy-smart
- 11 community demonstrations, such as zero net energy buildings
- 12 and communities, and renewable-based micro grids will serve
- 13 as community showcases of cutting edge technology system
- 14 components and integration strategies.
- These energy-smart community models will be
- 16 evaluated for their cost effectiveness, as well as their
- 17 ability to replicate it throughout IOU territories.
- Okay, and Pam Doughman will cover market
- 19 facilitation and the New Solar Homes Partnership.
- 20 MS. DOUGHMAN: There are three strategic
- 21 objectives in the market facilitation area. The first
- 22 objective is regulatory assistance and permit streamlining
- 23 for local governments and IOU service territories.
- 24 The first proposed initiative would provide
- 25 competitive grants to illustrate best practices for

- 1 coordinated infrastructure and land use planning. This
- 2 would coordinate land use goals with utility infrastructure
- 3 to streamline permitting processes and lower
- 4 interconnection costs.
- 5 The second initiative would provide competitive
- 6 grants to update planning and permitting processes, to
- 7 incorporate model clean energy ordinances, and other
- 8 strategies to facilitate clean energy.
- 9 Another initiative would conduct a needs
- 10 assessment to identify regulatory gaps within local
- 11 planning and zoning processes.
- 12 Staff also proposes an initiative to work with
- 13 local jurisdictions and industry to create additional model
- 14 ordinances for clean energy technologies.
- 15 A fifth initiative would partner with the Office
- 16 of Planning and Research to assist in implementing general
- 17 plan guidelines.
- 18 The last initiative in this area would provide
- 19 grants to develop educational materials for local officials
- 20 interested in clean energy.
- 21 These activities would help reduce project costs
- 22 related to permitting uncertainty and mitigate development
- 23 impacts on communities in IOU service territories.
- 24 The second objective is workforce development.
- 25 The proposed initiative under this objective would provide

- 1 grants to develop and enhance training and apprenticeship
- 2 programs to support clean energy development programs in
- 3 investor-owned utility territories.
- 4 Developing a well-trained, clean energy workforce
- 5 will increase the quality of clean energy infrastructure.
- 6 This objective would increase tools and resources available
- 7 to the clean energy industry to align workforce training
- 8 with labor demand.
- 9 The third objective is market assessment, program
- 10 evaluation and outreach. This objective benefits IOU
- 11 ratepayers by helping to ensure that investments and
- 12 policies are positioned to promote the advancement of
- 13 emerging technologies through the energy innovation
- 14 pipeline.
- The objective includes development of a web
- 16 portal to share EPIC project results and connect
- 17 innovators, investors, educators, job seekers and
- 18 policymakers seeking to promote adoption of clean energy
- 19 technologies.
- 20 This objective also includes forums to share
- 21 program results and an initiative for road mapping.
- In addition, this objective includes a survey in
- 23 IOU areas on end use energy consumption and saturation
- 24 characterization.
- 25 The fifth initiative would conduct a market

- 1 analysis of strategies to help clean energy storage, demand
- 2 response, electric vehicles and renewable energy.
- 3 The final initiative under this objective would
- 4 conduct project and program evaluation.
- 5 The CPUC EPIC Phase 2 decision indicated support
- 6 for adding \$25 million per year to EPIC for the New Solar
- 7 Homes Partnership Program, but needed a change in law to
- 8 allow this to occur.
- 9 Senate Bill 1018 allows the use of EPIC funds for
- 10 the New Solar Homes Partnership.
- 11 The New Solar Homes Partnership provides a one-
- 12 time, up-front incentive for eligible projects. This
- 13 brings down the up-front costs of solar, making solar
- 14 attractive for developers and making it available for new
- 15 home buyers.
- The NSHP program requires that all projects
- 17 exceed the energy efficiency requirements of the current
- 18 Title 24 building standards by at least 15 percent.
- 19 The staff final EPIC Investment Plan proposes
- 20 collection of \$50 million for the NSHP from 2013 through
- 21 2014.
- The CPUC EPIC Phase 2 decision states that, "\$162
- 23 million per year, plus \$25 million per year for NSHP
- 24 achieves about the same level of IOU ratepayer funding as
- 25 funds collected in the past for the Energy Commission's

- 1 Public Goods Charge, Renewable, and RD&D programs, and IOU
- 2 R&D programs combined."
- 3 Total NSHP funding is capped at \$400 million.
- 4 The staff final proposed Investment Plan provides
- 5 a foundation for innovation with the goal of achieving
- 6 transformation of the electric system, addressing current
- 7 barriers, and making new products available for the benefit
- 8 of ratepayers.
- 9 This slide shows the next steps. Today, staff
- 10 seeks adoption of the staff final EPIC proposed Investment
- 11 Plan as changed by the errata.
- 12 If the plan is adopted, staff will submit the
- 13 Commission Final Investment Plan to the CPUC.
- 14 The CPUC will have a proceeding to assess the
- 15 investment plans proposed by the four EPIC program
- 16 administrators.
- 17 The CPUC decision is expected in May of 2013.
- 18 After that time, the four EPIC program administrators will
- 19 begin implementation of the investment plans.
- Now, I'd like to pass the microphone to Allan
- 21 Ward.
- 22 MR. WARD: Good morning Commissioners, I'm going
- 23 to briefly explain a few details of the logistics of filing
- 24 the Investment Plan.
- 25 As part of the Commission's decision today, it

- 1 also needs to direct the Executive Director or his designee
- 2 to work with staff to do the following: Finalize the
- 3 adopted Investment Plan based on the decisions of the
- 4 Commission today; file the Investment Plan and an
- 5 application of consideration with the CPUC by tomorrow,
- 6 which is the deadline identified by the CPUC in its
- 7 decision; and make revisions to the adopted Investment Plan
- 8 to address issues raised during the CPUC's proceeding.
- 9 And all of these factors are reflected in the
- 10 proposed resolution that was distributed for this meeting.
- 11 We will electronically file the Investment Plan
- 12 by tomorrow, the deadline. And as part of the CPUC's
- 13 decision it requires the administrators, including the
- 14 Energy Commission, to serve the filing on multiple lists
- 15 identified in its decision.
- But under the CPUC's rules, because our
- 17 Investment Plan is so large, both in terms of numbers and
- 18 electronic size, we will not actually serve the document on
- 19 the people on the list serves. Instead, pursuant to the
- 20 CPUC's rules and procedures, we will be placing the
- 21 documents on our website and then filing a notice of
- 22 availability to all of those individuals.
- This not only complies with the CPUC's rules, but
- 24 ensures that these documents will be publicly available to
- 25 everyone, not just the people on the list serves, which

- 1 keeps the open and public process the Commission has used
- 2 throughout the development of the Investment Plan.
- 3 CHAIRPERSON WEISENMILLER: Thank you. Thank you
- 4 for that clarification on how the public can access this
- 5 document, if it is adopted.
- 6 MS. TEN HOPE: That concludes our presentation
- 7 and today we ask for your approval of the Investment Plan
- 8 as changed by the errata, and are available to answer any
- 9 questions.
- 10 CHAIRPERSON WEISENMILLER: Thank you. Let's
- 11 start by hearing public comment on it and then we can ask
- 12 questions and respond.
- So, we have speakers in the room and I'm sure a
- 14 number on the phone. So, the first speaker was Louis
- 15 Blumberg of Nature Conservancy.
- MR. BLUMBERG: Yes, thank you. Good morning
- 17 Commissioners, staff and the public. I'm Louis Blumberg
- 18 and I'm Director of the California Climate Change Program
- 19 for The Nature Conservancy.
- I want to say that we support the plan and the
- 21 resolution, and we want to congratulate the staff and
- 22 commend them for the excellent job that they've done.
- 23 We're especially pleased that the plan recognizes
- 24 the needs of natural resources and the nexus between the
- 25 energy system and the environment. For example, it

- 1 acknowledges the role of habitat and species in the Desert
- 2 Renewable Conservation Plan and it talks about the
- 3 importance of research on salmon and hydropower, and it
- 4 talks about the impacts, explicitly, of climate change on
- 5 the energy system.
- 6 And I'm reminded of the April 30th workshop, here
- 7 in this room, where you studied that and research presented
- 8 from the PIER program was really instrumental in moving
- 9 that forward.
- 10 The one change I would suggest is that you look
- 11 at giving increased funding for research for climate change
- 12 and the environment.
- 13 And I think the storm, Sandy, really shows the
- 14 impact that climate change has on our energy system. There
- 15 are 50 dead ratepayers, at least, there are over 6 million
- 16 people without power. Climate change is affecting our
- 17 energy system and we can't ignore it.
- 18 And I'm pleased that you're on top of that and I
- 19 would encourage you to do more on that.
- 20 And so as you implement this program I would
- 21 encourage you to take a very holistic approach, a very
- 22 comprehensive approach on the nexus between climate change
- 23 and energy on the environment.
- 24 I think that that is -- it's clear that the
- 25 generation, the production and the transmission of

- 1 electricity affects the climate, it affects the atmosphere,
- 2 it puts greenhouse gases into the atmosphere.
- 3 And it's also clear that we've increased moisture
- 4 in the air and the temperature in the oceans so that we're
- 5 having bigger storms.
- And so what we do with the generation of power
- 7 affects the power system and the ratepayers directly. And
- 8 so I think if you can take a holistic and a comprehensive
- 9 approach that would be great.
- 10 So, in conclusion, we support the resolution and
- 11 we don't want to slow down the process, we want it to go
- 12 forward, but we do want to see this greater emphasis on the
- 13 nexus between environment and climate change.
- 14 This is consistent with the Governor's emphasis
- 15 on reducing the risks of climate change to the people and
- 16 economy of California and I think it's really critical that
- 17 California not take a step backwards in its groundbreaking
- 18 climate change research program so, thank you.
- 19 CHAIRPERSON WEISENMILLER: Thank you. I was
- 20 going to make just a couple of comments following up. One
- 21 was with Commissioner McAllister's indulgence, since he's
- 22 the lead on this particular IEPR, I'm actually hoping to
- 23 have another workshop this year on climate change, much
- 24 more on how it affects not -- much more on demand and also
- 25 supply. So, certainly would encourage you to participate

- 1 in that.
- 2 And also would encourage you, one of the things
- 3 I'm thinking about is, as you know, from the climate study
- 4 we did with the 34 scientists looked a lot on vulnerability
- 5 and risk.
- And as we think of next steps there, I tend to
- 7 think a lot on the energy side. But I mean thinking about
- 8 that study, it's pretty clear that some of the more, larger
- 9 vulnerabilities are in other areas. You know, agriculture
- 10 for example, or resources.
- And so, again, as we think through the scope of
- 12 the next study and, obviously, we're limited to more of the
- 13 energy part. I have to make sure I'm bringing in partners
- 14 to provide the proper emphasis on some of the broader
- 15 issues.
- MR. BLUMBERG: Thank you, I look forward to that.
- 17 And as Commissioner McAllister said, it's all connected.
- 18 CHAIRPERSON WEISENMILLER: Good. Let's go to one
- 19 of our sister agencies, Jim Blatchford from the CAL-ISO.
- 20 MR. BLATCHFORD: Good morning Commissioners. I'm
- 21 Jim Blatchford with the California ISO and I want to thank
- 22 you for allowing me the time to speak here today.
- 23 The ISO is very pleased to support the 2012-2014
- 24 Triennial Investment Plan. We believe the document is an
- 25 excellent outcome of the CEC staff working very hard

- 1 alongside stakeholders to come up with a prudent and clear
- 2 investment plan.
- I attended all of the stakeholder meetings and I
- 4 want to commend your staff for doing a great job of
- 5 listening to the comments that were made and teasing out
- 6 the central issues, and then incorporating those issues
- 7 into the plan.
- For instance, at the ISO we're working very hard
- 9 on cost-effective metering and telemetry, and we see that
- 10 that's been moved to a high priority category that's going
- 11 to be taken up this year, so we appreciate that.
- 12 One of the areas of concern we had was on Table
- 13 29 in the solicitation timeline, which is 360 days long.
- 14 We hope this table is meant as a maximum timeline and not
- 15 as a prescribed timeline for all initiatives and all
- 16 solicitations.
- 17 And then, lastly, we wanted to make it very clear
- 18 that the ISO is available to provide technical support and
- 19 be part of any advisory group where the Commission needs
- 20 help.
- 21 Again, we fully support the Triennial Investment
- 22 Plan and the job well done. Thank you.
- 23 CHAIRPERSON WEISENMILLER: Thank you.
- 24 COMMISSIONER MC ALLISTER: I really appreciate
- 25 that. And as the lead on energy efficiency and also sort

- 1 of taking the mantle from Commissioner Peterman on the IEPR
- 2 next year I think there's a lot of really great discussion
- 3 that we're going to tee up with the ISO. Because I think
- 4 as we try to figure out ways to provide transparency and
- 5 visibility from the top end to the bottom in an electric
- 6 system, to really enable demand response, and the kinds of
- 7 communication and customer interaction that's needed to
- 8 take advantage of the new electric system, I think the ISO,
- 9 and the CPUC, and the investor-owned utilities, and all the
- 10 utilities, really, are -- they have to be at the table.
- I mean this discussion's all about them, it's all
- 12 about the agencies and how sort of the rules are made to
- 13 encourage that kind of communication, collaboration, and
- 14 seamlessness between, you know, from the top to the bottom.
- 15 And I'm really pleased with that aspect of the
- 16 Investment Plan, as well, because I think it's focusing on
- 17 the right things. The outcomes are going to feed right
- 18 into the discussion that we need to have at the practical
- 19 policy level. And I'm really looking forward to working
- 20 with the ISO on, you know, what that new structure, what
- 21 those new kind of frameworks are going to need to look
- 22 like. So, thanks a lot.
- 23 MR. BLUMBERG: Right. And I think Laurie's slide
- 24 that shows the new grid is something that we also highlight
- 25 at our Advanced Technical Center at the ISO, and explain to

- 1 people that the grid now goes in two directions and that we
- 2 have to have that visibility for that Smart Grid. So,
- 3 thank you.
- 4 COMMISSIONER MC ALLISTER: Thank you.
- 5 CHAIRPERSON WEISENMILLER: Thank you.
- 6 Bob Raymer.
- 7 MR. RAYMER: Thank you Mr. Chairman,
- 8 Commissioners, I'm Bob Raymer representing the California
- 9 Building Industry Association.
- 10 And in general we're very supportive of the
- 11 adoption of the EPIC Investment Plan that's before you
- 12 today.
- In earlier testimony I indicated our strong
- 14 support for the impact that this has had on jobs and the
- 15 economy, particularly that part of the program that's
- 16 related to the New Solar Home Partnership.
- 17 Today I'd like to provide a few brief comments
- 18 related to the benefits that the ratepayers will see from
- 19 this, primarily from the New Solar Home Partnership.
- 20 Over the last, I'd say, year to 15 months we've
- 21 seen a rather dynamic change with production housing, in
- 22 particular the availability of the, albeit rather small,
- 23 but persistent funding for the New Solar Home Partnership
- 24 has provide some of our largest production builders with
- 25 the ability to put solar in as a standard feature, as

- 1 opposed to just simply offering it as a design option.
- When they were offering it as a design option
- 3 penetration ranged from around a low of one percent to a
- 4 high of about three percent. Not all that good.
- Now, with the New Solar Home Partnership funding
- 6 and the economy starting to improve, we're seeing some of
- 7 the largest production builders in California, we're both
- 8 nationally and California based, putting this in as a
- 9 standard feature, which means market penetration goes from
- 10 three percent to 100 percent.
- 11 This, in addition, means that if you're using the
- 12 New Solar Home Partnership funding, you're also putting
- 13 extra energy efficiency into the home. So, you've not only
- 14 got a home that goes above and beyond in terms of energy
- 15 efficiency, but you've got a couple of kilowatts on the
- 16 roof of 100 percent of the project, which means the stress
- 17 on the grid is significantly reduced compared to that of
- 18 previous housing projects.
- 19 So, less stress on the grid, you've got a
- 20 healthier grid and a happier grid.
- 21 So, with that we're strongly supportive of this.
- 22 And clearly, with a healthier grid, the need to crank up
- 23 the plants during the hotter months is simply not there as
- 24 much as it was.
- 25 And so the ratepayers will not only see sort of a

- 1 healthier air quality level, they're going to see an impact
- 2 economically that you won't be paying these high rates for
- 3 the peaker plants.
- 4 Lastly, sort of a quick report on the status of
- 5 the industry, we're getting better. We had a low in 2009
- 6 where we were producing about 15 to 16 percent of normal.
- 7 The good news is for 2013 we'll be producing about 60,000
- 8 homes and apartments, so that represents roughly a doubling
- 9 of what we were doing just a couple years ago.
- The bad news is that's still 30 percent of
- 11 normal. We have a long way to go; we're still a fragile
- 12 industry.
- But with that, once again, I'd like to support
- 14 adoption of your Investment Plan. Thank you.
- 15 CHAIRPERSON WEISENMILLER: Thank you. Thank you
- 16 for being here, we certainly like to hear the good news
- 17 that your industry is rebounding. And, certainly, the
- 18 transformation of the industry to a more sustainable is
- 19 very important to all of us.
- 20 And I think, certainly, again I want to
- 21 acknowledge Commissioner Douglas's leadership, you know, in
- 22 terms of the standards and the fact that the standards
- 23 include the PV option in the future, and are really trying
- 24 to make things ready. But, certainly, New Solar Homes is a
- 25 way to really boost that and get the experience on the

- 1 ground we need for the next round of standards under
- 2 Commissioner McAllister's leadership.
- 3 COMMISSIONER DOUGLAS: Well, thank you for that.
- 4 And, obviously, it was an arduous and long process and,
- 5 certainly, Bob Raymer and the CBIA were working closely and
- 6 hard with us through the entire process, as were many other
- 7 stakeholders.
- 8 And I really see the New Solar Homes Partnership
- 9 Program as a really critical program where we work in
- 10 partnership with the builders, and we kind of blaze the way
- 11 forward to more energy efficient construction, more
- 12 photovoltaic and built-in energy efficiency features. And
- 13 that really helps us illuminate the pathway forward to the
- 14 State's energy efficiency goals and zero net energy goals.
- 15 So, I think that it's been a good working
- 16 relationship and one where we've been able to work through
- 17 some hard issues, and technical issues, and so on.
- And Commissioner McAllister, you know, we've
- 19 already got this fired up, plus you've inherited all of the
- 20 compliance on Title 24 standards. I think that was the
- 21 first item that passed over.
- But, you know, obviously this program, as
- 23 presented by the staff and as will be provided to the PUC
- 24 for their consideration, is really important in helping to
- 25 keep that process moving forward and achieve those benefits

- 1 for ratepayers.
- 2 COMMISSIONER MC ALLISTER: Yeah, and I think, so
- 3 totally agree. And again, it's really this -- you know,
- 4 this early to late, sort of the whole process that we're
- 5 trying to cover with varying initiatives at the Energy
- 6 Commission and holding hands with the PUC.
- 7 I think it's really, it's the only way to be
- 8 successful at this is to create the knowledge that we need,
- 9 that we can then help the marketplace adopt, and apply, and
- 10 to make sure that industry is communicating throughout the
- 11 process and letting us know what's possible, what they have
- 12 real problems with, what they -- you know, how easy or
- 13 difficult different initiatives are to actually do in the
- 14 real world.
- 15 And together we kind of all push the best
- 16 practices forward. And if you don't have those initiatives
- 17 out there, then you don't have the learning and you can't
- 18 actually do that.
- 19 So, I think, really appreciate Bob Raymer and the
- 20 CBIA for being at the table, sort of the good faith
- 21 participation in the process, acknowledging the challenges
- 22 that we have as a State to go to the point B.
- 23 That sometimes it seems a little bit closer, like
- 24 today, and sometimes it seems a little bit farther off.
- 25 But we have some big lifts to get to our zero net

- 1 energy goals and the pathway is something that, you know,
- 2 doesn't exist, yet, we're forging as we walk.
- 3 And so I think that collaborative process is
- 4 essential to pick the right path and I'm looking forward to
- 5 getting on with the next round of Title 24, and
- 6 implementation of the 2013 Title 24 standards, and then
- 7 getting on to the next round. So, thanks for your
- 8 comments.
- 9 COMMISSIONER PETERMAN: And Commissioners, I'll
- 10 also note there's been a tremendous amount of support and
- 11 interest in the New Solar Homes Partnership Program.
- 12 And I would like to applaud staff's efforts to
- 13 continuously improve the program.
- 14 We've had tremendous stakeholder involvement from
- 15 the builders, from the solar contractors, from consumers
- 16 and we're looking forward to more of that.
- 17 Staff is currently planning a workshop for this
- 18 fall on solar, on new homes. There's been a lot of
- 19 innovation within the sector in terms of business models,
- 20 in terms of opportunities.
- 21 And in that workshop we'll be covering where the
- 22 construction market is now, what the industry needs, what
- 23 consumers need in terms of protection in order to make us
- 24 more aware of what's happening, as well as to inform our
- 25 planned update of the New Solar Homes Partnership

- 1 Guidebook.
- 2 So, stay tuned, we look forward to your
- 3 engagement and look out for that workshop announcement.
- 4 CHAIRPERSON WEISENMILLER: Great. Let's go to
- 5 Blair Swezey, SunPower.
- 6 MR. SWEZEY: Thank you Chair Weisenmiller and
- 7 Commissioners. I'm Blair Swezey with SunPower Corporation,
- 8 I'll be very brief.
- 9 We would like to again recognize and thank the
- 10 Commission staff for the tremendous effort undertaken in
- 11 preparing this plan.
- 12 As I commented at the September 27th workshop,
- 13 SunPower supports the inclusion of funding for the New
- 14 Solar Homes Partnership as a component of the EPIC
- 15 Investment Plan.
- And we also very much appreciate and support the
- 17 several modifications that were made to the staff draft
- 18 that clarifies some of the NSHP funding questions that were
- 19 raised at the September 27th workshop.
- 20 While we do still have some concerns around
- 21 issues such as nearer term NSHP funding availability and
- 22 the proposed shortening of the incentive reservation term,
- 23 we are hopeful that these concerns can be addressed at the
- 24 CPUC and in the NSHP Guidebook revision process, as
- 25 Commissioner Peterman just announced.

- 1 And so we do urge the Commission to adopt the
- 2 staff Final Plan. Thank you very much.
- 3 CHAIRPERSON WEISENMILLER: All right, Bryan Early
- 4 from CALSTART.
- 5 MR. EARLY: Thank you Commissioners, Bryan Early
- 6 on behalf of CALSTART. We would like to thank you for the
- 7 excellent work done this far in the Investment Plan and
- 8 support its adoption.
- 9 We just wanted to overall stress the importance
- 10 of keeping hybrid electric vehicles in this discussion and,
- 11 specifically, focusing on the challenges and opportunities
- 12 created by the integration of electric vehicles into the
- 13 grid.
- 14 We did have a couple specific points on the
- 15 actual plan. CALSTART would have liked to have had the
- 16 broadened out the technology advancement investments under
- 17 S.9.3, though it appears that category has been eliminated
- 18 altogether.
- 19 Staff noted that there are other programs, such
- 20 as AB 118, which focus on this issue area. But though AB
- 21 118 is a good program, we do not think that this is
- 22 necessarily sufficient for the needs.
- 23 Also, we just wanted to ensure that we
- 24 sufficiently road map out vehicle electrification and it's
- 25 not clear that in the current draft that is one area that

- 1 will be sufficiently road mapped.
- 2 But we do overall support the adoption of the
- 3 plan. Thank you.
- 4 CHAIRPERSON WEISENMILLER: Thank you.
- 5 Yeah, staff do you have any comments to clarify
- 6 in response to him?
- 7 COMMISSIONER PETERMAN: On the particular
- 8 question about the road map?
- 9 MS. TEN HOPE: We have added, within the
- 10 Investment Plan, explicitly initiative to cover road
- 11 mapping because we think that there are several areas,
- 12 including this, where we really need to do more exploration
- 13 about what the private sector and other research
- 14 organizations are doing, and see whether updates are needed
- 15 in this plan or, more likely, the next investment plan.
- 16 CHAIRPERSON WEISENMILLER: Thank you.
- 17 Rhea Williamson from Humboldt State.
- MS. WILLIAMSON: Good morning Commissioners,
- 19 staff, participants, I am Rhea Williamson, Dean of Research
- 20 at Humboldt State University.
- It's been a wonderful experience for me providing
- 22 input to the draft plan and now comments to the final plan.
- 23 The efforts of all involved are commended and much
- 24 appreciated.
- 25 I'd like to just provide a few specifics that my

- 1 colleague will, hopefully, lead to as a follow up.
- With regards to energy, Humboldt State University
- 3 is the home of the Schatz Energy Research Lab known as
- 4 SERC. It recently completed, in the summer of 2012, a PG&E
- 5 and CEC PIER-funded strategic plan for renewable energy
- 6 called "Repower Humboldt." This was done for the Redwood
- 7 Coast Energy Authority.
- 8 And key findings were the need for research and
- 9 implementation of ways to enhance energy efficiency,
- 10 biomass, wave, wind, small hydro, solar, distributed
- 11 generation, electric vehicles and electric heat pumps.
- We have faculty and industry partners working
- 13 together on projects that integrate with these needs.
- 14 SIRK is also actively working on photovoltaic and
- 15 solar technologies transferrable to rural and developing
- 16 regions, has been very actively involved with hydrogen fuel
- 17 vehicle research, in collaboration with national, regional,
- 18 and industry partners.
- 19 In addition, in collaboration with our HSU
- 20 Forestry faculty, and with Federal and State funded
- 21 research we're doing work on -- ongoing work on emerging
- 22 biomass alternative fuels.
- 23 Technology includes torrefaction, pyrolysis and
- 24 biochar techniques, again with research and industry
- 25 partners across the country.

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- 2 waterfront laboratories from San Diego to Trinidad, which
- 3 is just north of our Humboldt State University campus.
- 4 These labs are actively researching wave energy, wind
- 5 energy, currents, GIS mapping of the subsurface, and
- 6 physical, chemical and biological impacts of these various
- 7 emerging energy technologies.
- 8 I'd be remiss to not note the importance of the
- 9 CSU in educating the future workforce of California. Many
- 10 of our students are -- they're here, they're in California,
- 11 they're from California, they currently live and work here
- 12 and many of them will be employed here.
- We're really interested in partnering with others
- 14 for the opportunities that this plan has -- potentially
- 15 will develop as a result of this in contributing to the
- 16 energy workforce of tomorrow.
- 17 And, you know, in closing I'd like to just make
- 18 the point we support this plan, are very interested in
- 19 being a part of the development of solutions that are being
- 20 proposed. Thank you very much for the opportunity to
- 21 speak.
- 22 CHAIRPERSON WEISENMILLER: Well, certainly, thank
- 23 you for being here today and we certainly encourage you to
- 24 continue sending more students here. We look forward to a
- 25 good workforce and encourage your participation in the next

- 1 stages in this. So, thanks again.
- MS. WILLIAMSON: Oh, we'll definitely be
- 3 involved. Thank you so much.
- 4 CHAIRPERSON WEISENMILLER: Okay.
- 5 COMMISSIONER MC ALLISTER: I wanted to just chime
- 6 in and say I think that the Redwood Coast Energy Authority
- 7 does great work with limited resources, I think, and just
- 8 in interfacing with other local governments throughout the
- 9 State. And that's a very productive, I think, relationship
- 10 to make the most of their limited resources, and they're
- 11 doing really good work.
- 12 And I would say the same for Humboldt State and
- 13 the Schatz Center because I think just really long term,
- 14 not flashy, good, solid research.
- 15 And we've had some of the students that have come
- 16 out of that program here, at the Commission, and I think
- 17 it's a very relevant program.
- 18 So, thanks for being here and participating.
- MS. WILLIAMSON: Thank you.
- 20 CHAIRPERSON WEISENMILLER: Okay, Connie Stewart
- 21 from Humboldt State, also.
- MS. STEWART: Good morning Commissioners, I'm
- 23 Connie Stewart from Humboldt State University.
- 24 I was Mayor of Arcata and helped create the
- 25 Regional Energy Authority, so thank you for mentioning it.

- 1 It is something we're very proud of and certainly work on a
- 2 shoestring to try to make a difference.
- 3 And I just want to take a moment and congratulate
- 4 the staff and the Commission for this very transparent and
- 5 comprehensive plan. You took sausage and turned it into
- 6 filet, which is something that doesn't happen often.
- 7 And, particularly, I want to emphasize the fact
- 8 that we are so thrilled to see such an emphasis on applied
- 9 research. CSU, as my colleague said, stands ready and
- 10 willing to help.
- 11 And I know you have great relationships with the
- 12 UC system, but CSU does do great research, too, and we look
- 13 forward to being a part of implementing this plan.
- 14 I do want to emphasize, HSU is a small and remote
- 15 university, and rural university and so we were so pleased
- 16 to see the discussion of the "Valley of Death" because
- 17 we -- you know, we have contracts with the World Bank to go
- 18 help small communities all over the world with technology
- 19 solutions and grids, Smart solutions, but we don't have a
- 20 lot of resources to ramp up and see if our technology will
- 21 work in California. So, we look forward to participating
- 22 in that.
- 23 And I do also want to echo something you've heard
- 24 earlier, we noticed in the zero emissions vehicles
- 25 discussion, although you take about it -- most of the

- 1 funding and emphasis is on electric plug-in vehicles and we
- 2 want you to just think about the other options there.
- 3 We recognize, also, that there's a lot of bang
- 4 for the buck in urban communities, but rural communities,
- 5 jobs and residents -- really, the amount of cost for energy
- 6 is very astounding, it's a big part of why we don't have a
- 7 lot of job growth.
- 8 And so as you implement the plan, and I know that
- 9 you always can come back at us and say, well, how do we do
- 10 this? And I don't have an answer, but as we implement the
- 11 plan I hope that you will consider the balance and make
- 12 sure that the rural areas of the State are benefiting from
- 13 this technology and don't get left behind.
- 14 So, once again, we would urge adoption. We thank
- 15 you so much for all the hard work and thank your staff.
- 16 Congratulations to all of you.
- 17 COMMISSIONER PETERMAN: Thank you for your
- 18 comments. I just wanted to point out a couple other
- 19 references and resources. You can feel free to stand there
- 20 or back, I don't have a question directly.
- 21 Regarding zero emission vehicles, for those of
- 22 you who are not aware, there is now a zero emissions
- 23 vehicle draft plan out from the Governor's office for
- 24 comment.
- 25 The Governor's Executive Order, earlier this

- 1 year, called for 1.5 million zero emission vehicles on the
- 2 road by 2025. And that plan lays out responsibilities for
- 3 a number of agencies and the Energy Commission has a strong
- 4 role in that through our AB 118 program.
- 5 And I would encourage the staffs across the
- 6 divisions to make sure that we're coordinating. And as
- 7 we're doing more deployment work through the 118 plan, and
- 8 through the ZEV plan that that's coordinated with the
- 9 research activities that are happening through the EPIC
- 10 program.
- Also, last week we put out a draft of the 2012
- 12 IEPR and that includes Chapter 5. And Chapter 5 is the
- 13 Renewable Action Plan and there are detailed actions there
- 14 for where we think the State needs to go in terms of
- 15 renewable developments to reach our 2020 goals and beyond.
- And so I think your comments spoke to some of the
- 17 larger policy and research areas that we need to be
- 18 considering. And, indeed, we are looking at those through
- 19 other plans, even if certain things aren't explicitly
- 20 called out in the EPIC Investment Plan.
- 21 And so I encourage you to participate in all
- 22 those forums and thank you so much for coming to Sacramento
- 23 today.
- 24 CHAIRPERSON WEISENMILLER: Yeah, I was also going
- 25 to make a couple of points. One is that although sometimes

- 1 it's perceived that we're a very UC-focused program, in
- 2 fact we do -- and in fact we have picked Sac State as the
- 3 Smart Grid Center for, you know, California which
- 4 indicates, again, that we do look for that special
- 5 expertise throughout the State, frankly.
- 6 And I was also going to say, certainly, one of
- 7 the reasons why there's the Bioenergy Action Plan and,
- 8 certainly got into the PUC's decision to have a strong
- 9 emphasis there is this notion that we really want to make
- 10 sure that we're focused on some of the rural areas, along
- 11 with trying to deal with some of the realities of the fire
- 12 hazard. Climate change is affecting our forests which is a
- 13 fire hazard in many ways and if we could change that, make
- 14 that more of a resource and less of a liability, we see
- 15 there's a potential twofer.
- And so, again, would certainly encourage that
- 17 Humboldt State be a strong part of the bioenergy part of
- 18 this program.
- 19 COMMISSIONER PETERMAN: Yeah, just on that as
- 20 well, within so many plans, within the Renewable Action
- 21 Plan there is, you know, references to some of the actions
- 22 noted in the State's Bioenergy Action Plan, which is
- 23 updated in August and particularly focusing on rural
- 24 opportunities with bioenergy and distributed generation.
- 25 And that plan proposes different initiatives in

- 1 order to have a wider geographic distribution of our
- 2 renewable resources.
- 3 And we have a workshop on the IEPR on November
- 4 7th, I believe. We'll confirm it by the end of the day, by
- 5 the end of the meeting. But it would be worthwhile
- 6 probably listening into that one, as well.
- 7 COMMISSIONER MC ALLISTER: I just wanted to say,
- 8 finally, on the rural issue, you know, I think we do --
- 9 you're right that I think it's not quite on the radar
- 10 screen in the sense that, you know, those load pockets
- 11 aren't as big as more urban oriented load pockets.
- 12 But I think we have acknowledged that rural --
- 13 you know, average incomes are lower and, therefore, just
- 14 apriori energy costs tend to be a higher percentage of
- 15 people's expenditures.
- And also energy costs more, it tends to cost more
- 17 in rural areas and it's mitigated by the care rates, and
- 18 stuff, to some extent.
- 19 But, you know, there's generally not natural gas
- 20 distribution so it's propane or electricity. And so water
- 21 heating, and space heating and things tend to be more
- 22 expensive and I think that's a -- you know, it's a
- 23 different dynamic and so I appreciate you bringing that up.
- 24 CHAIRPERSON WEISENMILLER: Excuse me, Dan Chia,
- 25 SolarCity.

- 1 MR. CHIA: Thank you Mr. Chairman and Members,
- 2 Dan Chia with SolarCity. SolarCity's a very active
- 3 participant in the New Solar Homes Partnership and so we
- 4 want to thank you very much at the outset for really coming
- 5 to the rescue of the program since the demise of the public
- 6 goods charge and elimination of funding for the program.
- We also, in particular, are partnering with
- 8 developers on net zero energy developments, which I know is
- 9 particularly important to you, and the PUC, and the State
- 10 overall.
- 11 So, I just want to briefly associate my
- 12 comments -- associate my comments with my solar colleagues
- 13 and builder colleagues, even though I wasn't here to listen
- 14 to them. But I'm sure they were very supportive of
- 15 inclusion of funding in the Investment Plan for the New
- 16 Solar Program. Thank you very much for that.
- 17 And thank you, in particular, over the course of
- 18 the past year for appreciating the benefit of long-term,
- 19 stable funding for the program when the RRTF was repaid
- 20 through -- by the Legislature for recognizing the
- 21 importance of the program to ensuring that the market is
- 22 truly transformed for the new builder program.
- 23 So, I want to just reiterate that support and
- 24 also just look forward to working with you, the PUC, the
- 25 staff to ensure a full funding consistent with statutory

- 1 requirements and, more importantly, consistent funding that
- 2 reflects market demand over time to ensure that the market
- 3 for solar and new buildings is truly transformed.
- 4 Thank you very much.
- 5 COMMISSIONER PETERMAN: Dan, thank you for your
- 6 comments. You can rest assured that your building
- 7 colleagues did speak positively about the program. And,
- 8 also, we had quite a discussion, actually, up here on the
- 9 dais about the benefits of the program and the ties to
- 10 energy efficiency, and zero net energy buildings and homes.
- 11 And also noted that staff is in the process of planning a
- 12 workshop for later this fall on the solar, on homes
- 13 markets, and we'll be looking at ways to continue to
- 14 improve the program and make it more relevant to the
- 15 industry needs.
- So, thank you for your comments and your support
- 17 for -- continued support for getting some of the loan
- 18 repayments paid back to the Commission for the use of this
- 19 program.
- 20 And, yes, the IEPR workshop is November 7th, so
- 21 you can all put that in your Blackberries.
- 22 CHAIRPERSON WEISENMILLER: Yes, thanks Pam for
- 23 confirmation on that.
- Okay, Valerie Winn, PG&E.
- 25 MS. WINN: Good morning, Valerie Winn with

- 1 Pacific Gas & Electric Company.
- I, too, wanted to add my thank you to the CEC
- 3 team for their work with us, with PG&E on just working to
- 4 reduce any overlap or duplication within the plans.
- 5 PG&E is one of the four program administrators,
- 6 with the CEC, of the EPIC Program and that collaboration
- 7 has been really invaluable as we go through, and really
- 8 worked to make sure that our customers' monies are being
- 9 used in the best possible way.
- 10 I also wanted to express appreciation for the
- 11 staff's willingness to talk about specific issues,
- 12 including New Solar Homes Partnerships.
- 13 And while PG&E was concerned about some of the
- 14 changes in the EPIC Investment Plan, we understand that
- 15 those changes are driven, really, by the legislative
- 16 process and those conditions.
- 17 And we look forward to working with you on other
- 18 changes to that program's streamlining in the workshop
- 19 process that you've mentioned.
- 20 Lastly, I think we're also benefitting from the
- 21 CEC's experience in some of the ARRA funding issues, where
- 22 you really worked -- or you learned a lot about how to
- 23 develop a flexible program where, if projects are not
- 24 performing, that you can move funds from one project to
- 25 another. And I think we're really benefitting from that

- 1 experience and looking to make the EPIC a very flexible
- 2 program in the same sort of way.
- 3 So, thank you. And again, I wanted to indicate
- 4 that we do support adoption of this plan.
- 5 CHAIRPERSON WEISENMILLER: Thank you. And again,
- 6 certainly want to thank all of the utilities for working
- 7 with the staff to avoid overlap, that's been critical for
- 8 all of our programs to be stronger.
- 9 I don't think there's anyone else in the room
- 10 with comments so it's time, again, if there is one to the
- 11 Public Adviser do the blue card.
- 12 And so I'll go to the people on the phone. First
- 13 Peter Miller, NRDC.
- MR. MILLER: Hello?
- 15 CHAIRPERSON WEISENMILLER: Hi Peter, you're on.
- MR. MILLER: Can you hear me? Hello?
- 17 CHAIRPERSON WEISENMILLER: Yes, we can hear you.
- MR. MILLER: Great, thank you. I want to just
- 19 quickly mention our support, I want to echo the comments of
- 20 the previous commenters and urge you to support adoption of
- 21 this investment plan.
- I think the range and the strength of the support
- 23 you've heard today is indicative of the quality and the
- 24 importance of this effort. We think it's critical to
- 25 moving the State forward in terms of achieving our clean

- 1 energy goals, as well as our economic and environmental
- 2 goals.
- 3 We intend to support approval at the Public
- 4 Utilities Commission and want to thank you for the
- 5 opportunity to comment today.
- 6 CHAIRPERSON WEISENMILLER: Thank you. Thank you,
- 7 Peter, for NRDC's support in this process and on this
- 8 effort to go forward in California.
- 9 Steve, Solar Energy Industry Association,
- 10 Zoretti?
- 11 MR. ZORETTI: Can you guys hear me?
- 12 CHAIRPERSON WEISENMILLER: Yes.
- MR. ZORETTI: Steve Zoretti with the Solar Energy
- 14 Industries Association here, in California.
- I wanted to start this morning by thanking the
- 16 Commission for the great work done in putting this plan
- 17 together. I also wanted to specifically note SEIAs
- 18 gratification for the Commission's support for the New
- 19 Solar Homes Partnership in this plan and, more generally,
- 20 over the past year since the Public Goods Charge expired.
- 21 The stop gap funding for the program from the
- 22 repayment of loans to the General Fund really came at a
- 23 time when funding was most needed this year. So, this was
- 24 and is greatly appreciated.
- 25 That said, while we understand and respect the

- 1 constraints the Commission faces when proposing funding for
- 2 the new Solar Homes Program at a level that is consistent
- 3 with builder demand, the final investment plan does,
- 4 itself, acknowledge that based on builder demand over the
- 5 past two years the proposed level in the final plan will be
- 6 quickly reserved.
- 7 So, because there's no new funding flowing into
- 8 the program currently, we are concerned that the program
- 9 may be suspended well before the PUC considers the plan or
- 10 the Legislature has the opportunity to approve the CEC's
- 11 budget.
- 12 And like any emerging business model dependent on
- 13 public support, stops and starts of this nature sends the
- 14 wrong message to the developers and the investment
- 15 community.
- So, having said all this I, again, stress our
- 17 appreciation for the CEC's work to date and wanted to
- 18 indicate our support for the plan.
- 19 We very much look forward to working with the
- 20 Energy Commission, the PUC and the Administration on a
- 21 sensible funding approach that really takes us through the
- 22 statutory end of the program and one which provides maximum
- 23 certainty to the marketplace builders and homebuyers.
- We also look forward to the Commission's Solar
- 25 Homes Workshop and thank you for setting that up, as well.

- 1 And just thank you for the opportunity to speak this
- 2 morning.
- 3 COMMISSIONER PETERMAN: Thank you for your
- 4 comments. I'll also note that over the last year we have
- 5 increased our public information about the status of the
- 6 funds, and reservations in the program, and so online you
- 7 can find information about that.
- 8 And we're continuing to monitor available
- 9 funding. There is still sufficient funding available for
- 10 the New Solar Homes Partnership Program.
- 11 And we roll down and close out the other programs
- 12 that were funded under the RRTF, as funds become available
- 13 or reservations are not utilized by other RRTF programs,
- 14 and those funds will also go to the New Solar Homes
- 15 Partnership.
- And so we'll continue to track progress. And,
- 17 you know, our aim is not to have any surprises out there
- 18 and so, as the situation changes, we'll keep stakeholders
- 19 informed. Thank you.
- 20 MR. ZORETTI: Thanks so much.
- 21 CHAIRPERSON WEISENMILLER: Okay, Colleen Quinn of
- 22 ChargePoint.
- 23 MS. QUINN: Thank you Commissioners. On behalf
- 24 of ChargePoint we just wanted to endorse the work of the
- 25 California Energy Commission staff and also underscore the

- 1 importance of the EPIC Program and how it will have a very
- 2 positive impact on one of -- I think one of the major
- 3 objectives here, which is to encourage electric vehicle
- 4 transportation and adoption in the State of California.
- 5 We are a Silicon Valley based company. We
- 6 manufacture electric vehicle charging station
- 7 infrastructure, deploy it in California and throughout the
- 8 world.
- 9 And the market in California is by far the most
- 10 important. Many of the policies -- frankly, the policies
- 11 of the Commission, the policies of the Governor and the Air
- 12 Resources Board have really contributed to that fact.
- So, this funding will be very, very important to
- 14 really kind of pursue what we call the next horizon to
- 15 allow energy services and the benefits of the grid to be
- 16 captured by the electric vehicle and the electric vehicle
- 17 driver.
- 18 So, thank you very much for an amazing effort, we
- 19 certainly support your work.
- 20 CHAIRPERSON WEISENMILLER: Thank you. Fred
- 21 Bauman from the Center for the Built Environment.
- 22 MR. BAUMAN: Hello, this is Fred Bauman from the
- 23 Center for the Built Environment at UC Berkeley. Thank you
- 24 very much for giving me an opportunity to speak.
- 25 And I wanted to just mention that the Center for

- 1 the Built Environment, for those of you that don't know, is
- 2 an industry/university cooperative research center focused
- 3 on building technology here at UC Berkeley.
- 4 And we have about 40 industry partners who serve
- 5 as our advisory board and work with us very closely on the
- 6 research that we conduct. And so it goes without saying
- 7 that the EPIC Program and previous CEC funding has been
- 8 extremely important to us and also extremely valuable to
- 9 our partners who are, you know, leading building designers,
- 10 and manufacturers, and so forth.
- 11 So, we really, really strongly support your
- 12 efforts and commend you for the good work on this plan. We
- 13 strongly hope that you will endorse it and move forward.
- 14 What I wanted to say today, very quickly, was
- 15 that I know that it talks a lot about developing next
- 16 generation, end use efficiency technologies, and so forth
- 17 in the building sector.
- 18 And in reading through the plan I didn't see a
- 19 lot of specific mentioning of indoor environmental quality
- 20 and so I just wanted to make a comment to kind of emphasize
- 21 that.
- That in our overall goals together of really,
- 23 strongly reducing energy use in California in the building
- 24 sector, we need to keep in mind kind of the goal of what is
- 25 the -- what is the target, what are we trying to achieve in

- 1 these buildings?
- 2 And we don't -- you know, there is something in
- 3 the plan that talks about occupant behavior and I read
- 4 through that and it seems to be more -- a little bit more
- 5 about motivation and what makes people choose to do this or
- 6 that.
- 7 But even more fundamental than that are issues
- 8 like thermal comfort, and this sort of thing, where if we
- 9 don't change the way we think about how comfort is provided
- 10 in buildings, it's going to be extremely difficult for us
- 11 to achieve these very aggressive goals that we have.
- 12 And so I just wanted to put that on the plate for
- 13 people to think about. I think if you review how building
- 14 operators and occupants, how they view the buildings that
- 15 we live in and work in today, really, comfort is king.
- 16 It's not energy, it's the does the building provide you
- 17 with the high quality environment for you to do the work
- 18 you do?
- 19 And by the way, if you can save energy while
- 20 you're doing that, you know, that's obviously what we all
- 21 hope for. But we can't forget that very, very important
- 22 goal of what is the comfort, what is the ability of the
- 23 environment to support what people are doing?
- 24 And so issues like can we change comfort
- 25 standards that are applied to buildings? California has an

- 1 extremely good opportunity to adopt some of these wider
- 2 comfort standards, such as the adaptive standard for
- 3 naturally ventilated buildings or other ways of extending
- 4 and creating non-uniform environments where people can
- 5 still be very comfortable, but at a much less energy
- 6 intensity.
- 7 So, these are the concepts I just want to put out
- 8 there. Thank you for your time and I look forward to
- 9 working with the EPIC plan in the future. Thank you.
- 10 CHAIRPERSON WEISENMILLER: Thank you.
- 11 COMMISSIONER MC ALLISTER: Thanks very much for
- 12 those comments. I would -- so, I very much agree that
- 13 indoor air quality in both the comfort sense and also the
- 14 more traditional sense of air quality, per se, are both
- 15 really important and we have to keep them in mind as we
- 16 tighten up our existing building stock and work on new
- 17 building standards.
- I would invite, very much invite participation in
- 19 the AB 758 proceeding because I think we'll be talking --
- 20 well, I know we'll be talking about those issues going
- 21 forward.
- 22 That's a really important effort to identify the
- 23 highest level or the most important priorities for getting
- 24 to very aggressive energy reductions in our existing
- 25 building stock, both residential and nonresidential.

- 1 So, I think the CBE could be a really valuable
- 2 participant in that and really hope that you can
- 3 participate in that discussion. Yeah, so thanks a lot.
- 4 CHAIRPERSON WEISENMILLER: Okay, are there any
- 5 other commenters on the phone?
- 6 Okay, I think it's time, then, to switch to the
- 7 dais.
- 8 Let me start out, since I've been the lead on
- 9 this. First, I think this is a great day for California
- 10 and certainly really appreciate the staff's hard work. I
- 11 don't know if it's the EPIC 11, or 13, or what the final
- 12 number you've dragged in -- 9.
- But, certainly, hats off to Laurie for -- given
- 14 what was an impossible schedule, you know, delivering a
- 15 very thoughtful product that was on time.
- And, certainly, I think meets what the PUC needs
- 17 for the next step.
- I think, you know, again when you look at the
- 19 challenges facing the State, climate change, the economy,
- 20 you know, where we're trying to really get to in terms of
- 21 the future energy system, it's very critical that
- 22 innovation be encouraged in drive there because I mean a
- 23 lot of the pieces we're trying to put together aren't there
- 24 now.
- 25 And we need to really, as we move to scale, drive

- 1 down the cost or look at integration in parts of this.
- 2 And so integration is key. I certainly
- 3 appreciate the Governor's recognition of the importance of
- 4 innovation and his letter to the PUC asking for a mechanism
- 5 to replace the old PIER Program.
- And at the same time really appreciate President
- 7 Peavey stepping forward at that time, as we were dealing
- 8 with the fallout of the legislative inaction, to sort of
- 9 bring this forward and the working relationship we have had
- 10 with the PUC in trying to convert that early vision to this
- 11 product.
- 12 You know, and again I think this product does a
- 13 great job of providing a way to really maximize the
- 14 benefits for California utility ratepayers and the IOU
- 15 utility ratepayers of this innovation, or by this
- 16 innovation trying to really provide benefits as we move
- 17 forward, real solid, tangible ratepayer benefits.
- 18 And I think this has been done in a very
- 19 transparent process. You know, again, we've talked about
- 20 the five public workshops. God knows how many hundreds of
- 21 people participated in those five workshops.
- 22 And at the same time we've got I think somewhere
- 23 around 239 comments. And again, the staff really labored
- 24 hard to put it into a very coherent document.
- 25 You know, and I think one of the things they

- 1 really appreciate is that along with the -- as you go
- 2 through the line-by-line items that, particularly, this
- 3 document in the presentation, trying to pull back to what
- 4 we're really trying to accomplish.
- 5 You know, that of the various strategies that
- 6 when you look at it in an area, such as energy efficiency,
- 7 we're saying we have to lay the groundwork to get to zero
- 8 net energy. We have to do the innovation to figure out how
- 9 we really transform our existing building stock.
- 10 We have to lay the groundwork for the next rounds
- 11 of building and appliance standards.
- We have to lay that groundwork for demand
- 13 response and storage -- you know, renewable integration's
- 14 going to be a huge issue wholesale on the DG side and we
- 15 have to lay that groundwork for ways to integrate that cost
- 16 effectively.
- 17 You know, I was down at a meeting down in Los
- 18 Angeles and I was really struck by Bob Foster, who is the
- 19 Mayor of Long Beach, Chair of the ISO Board, also sort of
- 20 one of the authors of the Warren Alquist Act, and I worked
- 21 with Bob years and years ago, when he was our first Energy
- 22 Efficient Division Chief and did our first round of
- 23 building standards.
- You know, and Bob was saying that he was really
- 25 struck by how fragile our electric grid is at this stage.

- 1 And the challenges that we're asking it to deal with in the
- 2 next 10 to 20 years and how we really need innovation to
- 3 make that system operate in a reliable fashion, an economic
- 4 fashion, and not have that fragility lead to real -- you
- 5 know, basically, a road we're all trying to do.
- So, I think you've got that, that fragility part,
- 7 certainly storage is a huge part, demand response,
- 8 forecasting tools, you know, visibility, all of those are
- 9 going to be critical on the renewable integration.
- 10 Climate change is huge. You know, it's having a
- 11 real effect right now. God knows it's probably -- it may
- 12 well be the root cause of what's happened on the East Coast
- 13 or at least one of the things that really exacerbated it.
- 14 So, we really have to deal with climate change,
- 15 ZEV, you know as we're trying -- again, our fundamental
- 16 challenge is our reliance on petroleum in the
- 17 transportation sector, what that means to this State, what
- 18 that means to the nation in terms of security. You know,
- 19 what that does to air quality in Southern California, we
- 20 have to really transform the system there.
- 21 So, again, I think there was a very good job by
- 22 the staff to say, okay, what are -- how is it all going to
- 23 pull together?
- 24 The same with biomass, as I said earlier, it's a
- 25 key part of trying to reach out to the rural community to

- 1 change what's some real vulnerability and risk for us into
- 2 a product.
- 3 So, certainly, you know, this project does a very
- 4 good job of laying out the detail.
- 5 But they've also done a great job, I think, of
- 6 dealing out with the administrative part. You know, when
- 7 you go through how we're going to take this vision and
- 8 implement it, you know, it's pretty clear again that we
- 9 need the flexibility to respond to changes.
- 10 You know, as things go forward, as technology
- 11 changes, as federal policies change, or programs, or
- 12 utilities we have to lay out a broad vision, but then going
- 13 forward with the road maps refine that.
- 14 But you've laid out a very detailed document on
- 15 how we administer that, the types of solicitations we're
- 16 going to do.
- 17 Again, as we've said all along, and certainly
- 18 we've gotten the message from the Legislature, I mean we
- 19 have to really use competitive processes to maximize the
- 20 value to the ratepayers.
- 21 We have to maximize the value to firms in
- 22 California, which you've done with that sort of preference
- 23 part.
- 24 And we also have to, you know, make sure that
- 25 we're really focused on things that can have -- that

- 1 provides not only long term opportunities, but near term
- 2 results.
- And so, again, I think it's -- you know, I'm sure
- 4 coming out of the PUC process there will be further
- 5 refinements, but it's a very solid, thoughtful project.
- 6 Again, I would like to thank the staff, would
- 7 like to certainly -- you know, the utilities have been a
- 8 partner and assisted us in trying to avoid overlap.
- 9 Certainly, while this is an Energy Commission
- 10 document, I think Andy Schwartz was at the meetings, and
- 11 has certainly been great, and the PUC staff to work with
- 12 on, as we're trying to translate and conform with their
- 13 decision.
- 14 And certainly, again, would like to thank all the
- 15 stakeholders for their participation, not only today, but
- 16 through the workshops and the comment. I think they have
- 17 given us a basis to come up with, you know, again, a plan
- 18 that we can be proud of.
- 19 Certainly, again, want to thank the staff for
- 20 their hard work and what was an impossible schedule. I
- 21 think we not only met, but exceeded our expectations.
- 22 COMMISSIONER PETERMAN: Chairman, thank you for
- 23 your comments. I think you've summarized what the role of
- 24 the plan is, our motivation and the tremendous amount of
- 25 work that has gone into it.

- 1 So, I'll just add a couple additional comments.
- 2 I want to thank you, Chairman, for your leadership on the
- 3 EPIC plan and moving forward with implementing EPIC. It's
- 4 been a pleasure to work with you and to combine our various
- 5 backgrounds and expertise in renewables and research, and
- 6 energy efficiency.
- 7 And appreciate, also, the questions that our
- 8 fellow Commissioners have asked during the workshops and
- 9 the previous forums we've had to discuss the EPIC plan.
- 10 Truly, it represents a cross-section of the
- 11 activities that are most important to the Commission.
- 12 Thank you again to staff. I think we can't say
- 13 that enough. I mean the work products have been
- 14 tremendous, executed with expertise and professionalism.
- 15 It has made our job easier, again, on what was a schedule
- 16 which really had no room for slack and staff met and
- 17 exceeded -- well, our expectations were high, so they met
- 18 them I will say. You know, and exceeded them beyond that.
- 19 Again, thank you for your collaborative work with
- 20 the PUC and the investor-owned utilities.
- 21 The EPIC Plan does not exist in a vacuum, it is a
- 22 part of a larger State initiative to promote clean energy
- 23 and so I appreciate -- that collaboration's going to be
- 24 important because we'll be implementing all these plans at
- 25 the same time and they may need to adjust over time as we

- 1 see what develops and what does not.
- 2 And again, I think the Chairman noted how staff
- 3 has worked well to acknowledge the administrative
- 4 constraints, but still within that provides some
- 5 flexibility.
- And just as a public member I also want to add we
- 7 are really excited to see the amount of new participation
- 8 from diverse stakeholders in the EPIC proceeding. We have
- 9 a lot of forums here at the Energy Commission and, as you
- 10 all know, we've administered the PIER Program and a number
- of our renewable programs for a number of years.
- But through this process we've attracted even
- 13 more stakeholders and that's terrific because we want
- 14 public involvement. That's why we hold the workshops, why
- 15 we have numerous drafts. It takes more time but in the end
- 16 I think the process is more transparent, which should make
- 17 the implementation more efficient.
- 18 So, again we are -- I am supportive of adopting
- 19 this plan and thankful for the Governor, and President
- 20 Peavey for supporting continuation of this important type
- 21 of funding.
- 22 COMMISSIONER DOUGLAS: I'd like to make a couple
- 23 comments as well, and I think the first thing I want to say
- 24 is that I think this plan is just extremely well done in
- 25 the way that it lays out both the policies and the research

- 1 priorities that help implement the policies.
- When I started really looking at the document and
- 3 thumbing through the document the first thing I started to
- 4 think about was how useful it would be to me, as a
- 5 Commissioner, in speaking engagements around the State to
- 6 really hold up as an example and show people, you know,
- 7 because it's such a good synthesis of the State's policies,
- 8 the vision for what the electricity sector is going to look
- 9 like and what we can do to facilitate that. And what we
- 10 are doing throughout the Energy Commission and outside of
- 11 the Energy Commission to facilitate that, and the role of
- 12 public research as a tool in moving forward with that
- 13 transition.
- 14 And when I -- you know, that was one of my first
- 15 impressions as I looked at the document, this is an
- 16 incredibly useful document, this puts things together in a
- 17 really helpful way. It helps people see the connections
- 18 and it helps people see where these policies come from and
- 19 why they're here.
- 20 And so I want to thank staff for just doing a
- 21 tremendously good job on the document.
- It also, as the Chairman noted, goes into very
- 23 great detail in terms of the nuts and bolts of the process,
- 24 and solicitations and, you know, what they would look like,
- 25 and what we would be looking for. I think that's

- 1 tremendously helpful. I mean it is setting up an
- 2 incredibly transparent process.
- I think it's important, going back to, I think,
- 4 Valerie Winn's comment on flexibility, I think it's
- 5 important for us to preserve flexibility or some measure of
- 6 flexibility even as we move forward with putting
- 7 information out, out front, which certainly supports
- 8 transparency and certainly supports the PUC in its role of
- 9 really reviewing the nuts and bolts of the program.
- 10 So, I do want to make a note that, as Valerie
- 11 Winn said, and as the lead Commissioner for ARRA I can say,
- 12 yes, lesson learned, flexibility is really important in
- 13 programs like this. And being able to move, you know, make
- 14 sure that high-performing projects get resources, and when
- 15 the projects are not performing there's oversight that
- 16 gives the ability to shift resources. That was very
- 17 helpful in the ARRA context. In fact, it was essential in
- 18 the ARRA context.
- I saw, as I went through the document and,
- 20 certainly, as we had the discussion today and heard from
- 21 stakeholders, a lot of clear, articulable, important
- 22 benefits to ratepayers that this program will provide.
- 23 I'm going to focus on -- in my comments I'm going
- 24 to focus on the ones that are most pertinent to some of the
- 25 work that I do on a day-to-day basis as the lead

- 1 Commissioner on siting and particularly as it relates to
- 2 the Desert Renewable Energy Conservation Plan, but beyond
- 3 that.
- 4 And I wanted to note Louis Blumberg, who was the
- 5 first speaker today, raised and supported the Energy
- 6 Commission putting forward environment as a place to focus
- 7 research. I think he would have liked us to have put or
- 8 recommended more money for environment, and we'll let him
- 9 raise that at the PUC.
- 10 But I think that it is essential. In the Desert
- 11 Renewable Energy Conservation Plan we're also working --
- 12 we're working closely with the utilities and other
- 13 stakeholders. We had a workshop here probably back in
- 14 July, where we talked about land use planning, and
- 15 environmental information, and how is that helpful to
- 16 utilities, and agencies, and others in their planning and
- in the development of energy infrastructure?
- 18 And it came through really loud and clear from
- 19 the IOU representatives, from other agencies at various
- 20 levels that the sort of information that would be developed
- 21 through this kind of research will reduce risk. It will
- 22 reduce uncertainty. It will lead to lower environmental
- 23 compliance costs. It can lead to more clustering of
- 24 projects in areas with both lower environmental impact but
- 25 also, by the way, shorter gen ties to get the power into

- 1 the transmission system.
- 2 Potentially, an ability to optimize transmission,
- 3 potentially -- and, potentially, an ability to optimize
- 4 transmission in interesting ways, both by understanding
- 5 where it might not be a good investment and also
- 6 understanding where the transmission system and
- 7 transmission investments we make might actually want to be
- 8 optimized for more capacity than we're necessarily thinking
- 9 about at this moment because it's going to an area that
- 10 has, by virtue of our land use and planning work, a high
- 11 level of generation potential.
- 12 So, I think that the benefits in the
- 13 environmental context are very real.
- 14 I'll just mention a few other examples. I was
- 15 really pleased to see the focus in the plan on research on
- 16 avian species. In permitting wind projects in California
- 17 right now avian species, and particularly eagles, are a
- 18 tremendous challenge and barrier to permitting. And in
- 19 fact a number of wind facilities that are operating are
- 20 operating at the moment without permits for eagles. And
- 21 it's an issue that's been ongoing for some time.
- 22 And the State and Federal Wildlife Agencies are
- 23 working with the industry to try to find a path forward
- 24 where we really need better baseline population data, we
- 25 need better understanding of how to do mitigation methods.

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- 2 rely on are reliable, but not as effective, necessarily, at
- 3 preserving and protecting eagle populations as they will
- 4 need to be in order for us to meet our renewable energy
- 5 goals and to expand the amount of wind power in the
- 6 California system to reflect our future needs, and the
- 7 potential for wind generation.
- 8 So, this research is also, I was pleased to see,
- 9 is not only eagles, but broadly avian species because with
- 10 power towers, for example, there may be solar flex issues,
- 11 there may be impacts on bats and other species, as well as
- 12 raptors.
- So, for wind and for other renewable energy
- 14 resources research is playing a really important role in
- 15 allowing us to understand our options, allowing us to
- 16 reduce risk, allowing us to improve the mitigation that we
- 17 might think of that both enables projects to go forward and
- 18 ensures that we're complying with State and Federal
- 19 Endangered Species Act, that we're conserving species.
- In the case of eagles, permits can't be issued
- 21 for eagles unless it's under what's called a Natural
- 22 Communities Conservation Plan. So, that presents an even
- 23 higher standard for issuing a permit for eagles.
- 24 And under the Federal law, permits for eagles are
- 25 issued under the Bald and Golden Eagle Protection Act which

- 1 is, again, a higher standard and a challenging one to meet
- 2 without much better data and information that needs to be
- 3 developed.
- 4 So, I think that -- I appreciate that focus in
- 5 this document and I think that we can make a contribution,
- 6 and I think it will be an important contribution to the
- 7 State. And it will help ensure that investments are not
- 8 stranded, and it will help ensure that, again, we have more
- 9 certainty, less uncertainty.
- 10 And in the workshop that we had, you know, I
- 11 think it was PG&E that mentioned that the information
- 12 that's being developed in the Desert Renewable Energy
- 13 Conservation Plan is already being used, they're already
- 14 taking the maps, and data, and layers that have been
- 15 developed to screen solicitations and just improve the
- 16 environmental screen.
- 17 And so it's just another example of how this kind
- 18 of information can reduce uncertainty and improve outcomes.
- 19 So, let's see, on siting more broadly, outside of
- 20 the desert, again Louis Blumberg mentioned that, but
- 21 climate, and salmon, and hydropower. These are all issues
- 22 that we need to understand.
- 23 And I think that as a Commission that does
- 24 permitting on projects that may have quite significant
- 25 impacts on the environment, you know, we see firsthand the

- 1 sorts of choices that we can be confronted with when we
- 2 have a project proposing a place, and we have a suite of
- 3 mitigation options are available, and we're trying to
- 4 understand how to best apply that and apply the standards
- 5 in law, research can greatly improve both information and
- 6 outcomes, and current decisions and future decisions. And
- 7 that has direct and important benefits to ratepayers.
- 8 So, I will keep my comments to the siting part of
- 9 this but I want -- in terms of my detailed comments.
- But I want to thank the staff for a job very well
- 11 done and I certainly strongly support this plan.
- 12 COMMISSIONER MC ALLISTER: Okay, I'm not sure
- 13 what I'm going to say that hasn't already been said here
- 14 but, you know, I have to give kudos to staff because -- you
- 15 know, I think there's been universal recognition of the
- 16 challenge and the fact that they really knocked it out of
- 17 the park here putting this plan together, and a huge lift
- 18 so Laurie and staff for sure, and Chair Weisenmiller and
- 19 Commissioner Peterman for your leadership on it, really
- 20 critical.
- 21 When I read the draft of the report I was -- it
- 22 was already of such high quality that it was hard to make
- 23 critical comments.
- 24 And then the next round, I think the sequencing
- 25 was actually proper in that the priorities were identified

- 1 and the strategic initiatives laid out, and then more of
- 2 the details were filled in, in the revisions, as far as
- 3 process, and more detail about -- you know, nuts and bolts
- 4 about how the plan would be implemented. So, I thought
- 5 that was strategically very well done.
- 6 And clearly the -- excuse me -- clearly, the
- 7 discussion with stakeholders was very useful all along.
- 8 The suite of initiatives that's been laid out is really
- 9 comprehensive and also just very savvy in acknowledging
- 10 where the marketplace is, and what the key things that need
- 11 to happen and be funded, or the key areas actually are.
- 12 And I also just would point out, you know, not to
- 13 criticize kind of the Federal government here, but I think
- 14 if you sat -- if you look at the ecosystem of agencies and
- 15 stakeholders that have gone into working on this plan, and
- 16 it's the PUC -- it's the Governor's Office, the PUC, kind
- 17 of everybody huddling, coming together, having a -- sorry?
- 18 COMMISSIONER PETERMAN: The Legislature.
- 19 COMMISSIONER MC ALLISTER: The Legislature yeah,
- 20 exactly. When there was a need, when the process could not
- 21 come to a conclusion to reauthorize, you know, the Public
- 22 Goods Charge and PIER at the Legislature, I think everyone
- 23 kicked into gear to figure out how to make it happen.
- 24 And I think if you look at that collaborate
- 25 process and sort of compare it to what happens or doesn't

- 1 happen at the Federal level, it's just California is really
- 2 an example to emulate.
- 3 And this research actually is relevant all across
- 4 the country, not just in California. So, I think it really
- 5 is a model process and program.
- 6 And really want to agree with Commissioner
- 7 Douglas, you know, when you read through it and you're
- 8 like, wow, this is great, there's a very well-articulated
- 9 justification for every single strategic objective.
- 10 And I can go around and I can use it to explain
- 11 to people why we're doing what we're doing, and that's just
- 12 huge. Even the Legislature and I think many, many
- 13 stakeholders in this that come out it with not the kind of
- 14 depth of information that we have here at the Commission,
- 15 and at staff, this document is really useful for explaining
- 16 what the importance of these various initiatives is.
- 17 And, you know, with the added filter this time
- 18 around that it was critical that every initiative proposed
- 19 have significant, clear ratepayer benefit because now the
- 20 process sort of shifted over to the collection mechanism
- 21 being from ratepayers through the PUC and that is extremely
- 22 important.
- 23 And so that additional factor I think has been
- 24 put into the plan extremely well and comprehensively.
- 25 So, you know, I would -- I want to put the

- 1 benefit -- my perception of the benefit of research in
- 2 slightly different terms.
- 3 You know, the research -- so the applied research
- 4 I really see as critical for the challenges that we have
- 5 going forward because we have to figure out ways to better
- 6 engage with ratepayers, customers, and citizens. And that,
- 7 inherently, gets us into behavior, it gets us into
- 8 persuasion, it gets us into really, I think, a much more
- 9 collaborative relationship with the customers through the
- 10 utilities, be they investor-owned, in this case, or
- 11 publicly owned, to sort of again have a tent that's big
- 12 enough to have discussions that can have an impact on how
- 13 people utilize energy.
- 14 And so I really appreciate the behavior -- kind
- 15 of some of the various focuses on those issues, behavior,
- 16 just to tick a few of them off, energy efficiency, demand
- 17 response.
- 18 I think I agree with the ISO comment on
- 19 telemetry. I think that's very, very important for
- 20 enabling that sort of interaction to happen.
- 21 The ancillary services, you know, how can we work
- 22 at the customer level to provide ancillary services that
- 23 have benefits to the grid? I mean that's a huge question.
- 24 And as Chair Weisenmiller said, there are a lot
- 25 of fundamental research projects that have to take place to

- 1 get to the answer there and enable the discussion to be as
- 2 practical, pragmatic as possible because at the end of the
- 3 day we're talking about investments.
- 4 And just, finally, on the energy efficiency side,
- 5 you know, a lot of the existing building impact is going to
- 6 be mediated by actual contractors out in the real world.
- 7 And so the research that we engage here I think you can
- 8 say, you know, the Center for the Built Environment
- 9 comments, for example, you know, the indoor air quality is
- 10 going to happen when a contractor actually does the right
- 11 tests, and does the right measurements, and has the right
- 12 tools at his or her disposal to actually make that happen
- 13 in practice.
- 14 And, you know, if you think about, okay, we're
- 15 looking at the grid and then all the way down to the
- 16 individual residential customer and their contractor. It's
- 17 a big -- it really is an all-hands-on-deck kind of
- 18 endeavor.
- 19 And so I'm really excited that all of the things
- 20 that I'm saying are either stated or implied in the
- 21 research priorities that are in this document.
- 22 So, I'm extremely supportive and really excited
- 23 to avail myself of the outcomes of all this research and
- 24 work with the various teams on actually -- you know, once
- 25 it comes down to specifics and we're looking at RPs, and

- 1 we're looking at real -- you know, looking at who's
- 2 actually going to do what work, you know, rolling up my
- 3 sleeves and helping those projects be a success as well.
- 4 So, again, kudos to staff and thanks for all the
- 5 hard work at the Commissioner level as well, so thanks.
- 6 CHAIRPERSON WEISENMILLER: Thank you. So, we
- 7 have a proposed resolution before us. I'd like to move
- 8 that resolution.
- 9 MR. WARD: Mr. Chairman, if I may, just to
- 10 clarify for the benefit of everyone here, as well as the
- 11 record.
- 12 CHAIRPERSON WEISENMILLER: Yeah, good.
- MR. WARD: What you're voting to approve is the
- 14 staff final draft of the Investment Plan as changed by the
- 15 errata.
- 16 CHAIRPERSON WEISENMILLER: Precisely.
- 17 MR. WARD: And the resolution to come out of this
- 18 meeting would be the resolution that was proposed, which
- 19 has the logistical filing steps that I mentioned earlier.
- 20 CHAIRPERSON WEISENMILLER: Right, precisely,
- 21 that's exactly what we want -- exactly what I want to move
- 22 at this stage.
- So, do I have a second?
- 24 COMMISSIONER PETERMAN: Yes, a second.
- 25 CHAIRPERSON WEISENMILLER: Okay.

- 1 COMMISSIONER PETERMAN: Has it been moved?
- 2 CHAIRPERSON WEISENMILLER: Yeah, it's been moved
- 3 and seconded.
- 4 All those in favor?
- 5 (Ayes.)
- 6 CHAIRPERSON WEISENMILLER: This item passed
- 7 unanimously. Again, thanks to staff.
- 8 Move on to the posting. Thank you.
- 9 Minutes; I have to abstain on this since I was
- 10 not here on October 10th.
- 11 COMMISSIONER DOUGLAS: All right, so move
- 12 approval of the minutes.
- 13 COMMISSIONER MC ALLISTER: And I'll second.
- 14 CHAIRPERSON WEISENMILLER: All those in favor,
- 15 with me abstaining?
- 16 (Ayes.)
- 17 CHAIRPERSON WEISENMILLER: So, this passed
- 18 three -- or three votes with one abstention.
- Okay, let's go on to Lead Commissioner or
- 20 Presiding Member reports.
- 21 COMMISSIONER PETERMAN: I have to think about it.
- 22 CHAIRPERSON WEISENMILLER: Okay. Yeah, I was
- 23 just going to mention a couple of things. First, I was
- 24 going to note that I was on vacation in Spain and that as
- 25 part of that I did do a little energy stuff on my own

- 1 nickel. And that was I went -- both were interesting, I
- 2 went -- Iberdrola has its worldwide wind dispatch center in
- 3 Toledo, and so I went in there and looked at what they were
- 4 doing. It's a real state-of-the-art system because they
- 5 were looking at not only -- they're, I guess, the second
- 6 largest wind developer in the world, but they have stuff
- 7 scattered. Obviously, the U.S. a pretty substantial
- 8 presence, a huge presence in Spain, you know, Poland,
- 9 England.
- 10 And so they have the ability not only to monitor
- 11 each of the windmills or wind machines in that location,
- 12 but also the various components of the project to
- 13 understand if the problem was the blades, the
- 14 interconnection, you know, where is there a problem that's
- 15 causing it not to be really performing.
- And so they're pretty much a state of the art.
- 17 Obviously, we have a lot of small wind machine developers
- 18 who then sort of send that off to somebody else to operate.
- 19 Well, they have what must be a fantastic
- 20 collection of operating data on their machines and the
- 21 ability to continue to refine and improve those. And also
- 22 the ability to keep thinking about how to enhance the
- 23 monitoring they're doing.
- So, right now they're putting cameras on some of
- 25 the machines so that they can see what's going on.

- 1 But they have what they said is a very good
- 2 record on forecasting, you know, performance. Particularly
- 3 in Spain they have a pretty -- a very diverse set of
- 4 locations. And from that, and with the experience they're
- 5 getting, they feel like they have a very solid record of
- 6 forecasting what their performance is going to be and,
- 7 obviously, a pretty good working relationship with the
- 8 Spanish version of the ISO.
- 9 I also, when I went to Seville, went to see the
- 10 Abengoa plants. They have sort of a solar R&D site and as
- 11 part of that just about any solar technology, solar
- 12 electric technology you can imagine is there, and in some
- 13 sort of scale.
- 14 So, on the solar thermal they have -- and again,
- 15 these are all more experimental than anything else -- a 2o-
- 16 megawatt project, a 10-megawatt project, a bolt and salt
- 17 project, a combined gas solar thermal project.
- They have a couple of different types of PV,
- 19 including concentrating -- they obviously had the troughs.
- 20 You know, they have a couple hundred megawatts of troughs
- 21 there and they also have the new experimental trough stuff.
- 22 I guess at one point they had Sterling engines, but they've
- 23 been sort of scraped away and moved off site.
- 24 So, it was pretty impressive. I got to go to the
- 25 top of the 20-megawatt and look out at the fields. So,

- 1 anyway, that was pretty neat.
- 2 Since I came back, as it was indicated, did the
- 3 presentation to CAPCOA. They wanted to understand what
- 4 the -- you know, what was going on at San Onofre and what
- 5 the indications were for air quality in California. And so
- 6 they're really moving much more in that direction.
- 7 And on this week I was at -- down in L.A. for the
- 8 Coalition of Environmental Protection Restoration and
- 9 Development, which was a pretty high level group looking at
- 10 unique environmental issues in the South Coast and, you
- 11 know, what some of the options there are, particularly
- 12 electrification. But, you know, they're essentially trying
- 13 to get, again, a stakeholder process started to think about
- 14 some more creative solutions down there.
- Oh, yeah, the Port was there, yeah. Actually,
- 16 the Port -- the Port Commissioner indicated that they
- 17 expected 400 megawatts of incremental load at both L.A. and
- 18 Long Beach, and that is by cold ironing ships. And that's
- 19 ignoring electrification of trucks or electrification of
- 20 the rail, but just dealing with shipping.
- 21 COMMISSIONER PETERMAN: Let me do my update next
- 22 as it kind of dovetails with yours, Chairman.
- 23 Since our last business meeting I participated in
- 24 an event celebrating the repowering of the Shiloh IV
- 25 wind -- wind facility, wind project in Rio Vista,

- 1 California.
- 2 And it's one of the oldest wind sites in
- 3 California and the repowering is the largest repowering in
- 4 the nation.
- 5 And what the repowering does is it will allow for
- 6 more output and a smaller footprint. And so they're able
- 7 to increase the efficiency multiple times over and that's
- 8 exciting, because as we look to develop a new renewable
- 9 project, it's also good to look for opportunities to
- 10 repower existing ones, since those are geographic areas and
- 11 sites that have already been planned and permitted for
- 12 renewable development.
- Also, as lead Commissioner on the 2012 IEPR, I'm
- 14 very excited that we released last Wednesday a draft of the
- 15 IEPR. It is the update year and so it is not as
- 16 comprehensive as the odd years, but it still does touch
- 17 upon infrastructure, natural gas, forecast and,
- 18 particularly, the newest section is, as I noted earlier,
- 19 our Chapter 5, which is a Renewable Action Plan for the
- 20 State.
- 21 We had a total of seven workshops to develop the
- 22 Renewable Action Plan. We had nine workshops in total for
- 23 the IEPR. The Chairman and myself were lead Commissioners
- 24 on the IEPR and so appreciate working with you on that.
- 25 And we're really looking forward to feedback. We

- 1 had a tremendous amount of input. We've laid it out kind
- 2 of similar, in some sense, to the EPIC Plan, where you can
- 3 really see the actions listed as bullet points. We want to
- 4 make sure it's readable and understandable. We'll have a
- 5 workshop on November 7th and we look forward to everyone's
- 6 comments and feedback before and after the workshop. Thank
- 7 you.
- 8 CHAIRPERSON WEISENMILLER: Yeah, I would just
- 9 note, obviously, I really appreciate the opportunity to
- 10 work with you on both EPIC and the IEPR.
- 11 And also the fact I always like to point out on
- 12 the Shiloh project is that is at a location where PG&E
- 13 wanted to build the Montezuma Coal Plant, and Brown I,
- 14 which died after we killed Harry Allen in Warner Valley.
- 15 So, that's great to see it go from coal to wind.
- 16 COMMISSIONER PETERMAN: Uh-hum, and it's also the
- 17 site of a very popular cell phone commercial. You see the
- 18 guy running and he's like "where am I," Rio Vista. And so
- 19 I mentioned that when I was down there and everyone was
- 20 really excited, and they're like, yeah, that's bringing
- 21 people to our town.
- 22 And so it's nice to see wind energy featured in
- 23 popular media, as well, because we want to show that this
- 24 really is not the technology of the future, but this is the
- 25 now.

- 1 COMMISSIONER DOUGLAS: I do not have anything to
- 2 report.
- 3 COMMISSIONER MC ALLISTER: I appreciate the
- 4 reports, particularly Chairman Weisenmiller. I spent a
- 5 total -- the first half of this year I spent a total of
- 6 about a month in Spain and managed to really not do
- 7 anything related to energy.
- 8 (Laughter)
- 9 COMMISSIONER MC ALLISTER: Now, I sort of regret
- 10 it but, actually, you know, the beach in Portugal was
- 11 pretty nice.
- But I really just want to report and highlight,
- 13 with respect to PIER that I last week went to the Silicon
- 14 Valley Leadership Group Conference on -- presented on
- 15 efficient data centers.
- And it was a really good event, there's some
- 17 amazing technology coming up and there was, I think, just a
- 18 powerful sense there of how important the PIER investments
- 19 over the years have been for the efficient data center
- 20 discussion and technology development.
- 21 And I think it really highlights that, you know,
- 22 we've been at this for a long time, starting more than ten
- 23 years ago with funding various initiatives to look at this
- 24 as a load, and looking at solutions for data centers, and
- 25 how to design them both as from a whole building approach,

- 1 individual, sort of down to the server level, really figure
- 2 out ways to make that equipment more efficient.
- 3 Of course, in the last ten years data centers
- 4 have expanded and, you know, they're expanding so quickly
- 5 as the Cloud kind of takes over. And I think there's an
- 6 acknowledgement that there's really sort of a moral hazard
- 7 going on where it doesn't cost the user in their home
- 8 anything to put, you know, a billion pictures on the web
- 9 but, yet, that actually really has pretty big implications
- 10 for how much it costs the world to provide that.
- 11 And so the industry is figuring out how to sort
- 12 of realign to be as efficient as possible, but also
- 13 encourage the right things for the Cloud and make sure that
- 14 it's used optimally and efficiently.
- 15 So, it sort of encapsulates the complexity of
- 16 some of these issues because you have -- they're system
- 17 issues. So, there's equipment issues, there's whole
- 18 building issues, and then there's system and behavior
- 19 issues involved.
- 20 And there have been probably a dozen or more
- 21 research projects of various sizes, starting from very
- 22 small up to a few hundred thousand dollars, looking to do
- 23 technology development and sort of analysis related to data
- 24 centers.
- 25 And it's now several percent of our electricity

- 1 load in the State and growing, quickly.
- 2 And so if we hadn't the foresight to fund those
- 3 issues then we would not be in the place that we are today,
- 4 which is able to actually create policy to try to address
- 5 this issue effectively.
- 6 And so I think, you know, obviously I had a good
- 7 time at the conference and there were a lot of
- 8 knowledgeable people about this, but there was clearly a
- 9 sense that there was a knowledge base that we could all
- 10 work with, and work together with.
- 11 And so I think the PIER Program and now evolving
- 12 into EPIC has been and will be very important, not only in
- 13 that sector, but just across the board for creating that
- 14 kind of a collaborative framework. So, I wanted to just
- 15 report back on that.
- 16 CHAIRPERSON WEISENMILLER: Great. Chief
- 17 Counsel's Report.
- MR. WARD: Nothing.
- 19 CHAIRPERSON WEISENMILLER: Executive Director's
- 20 Report?
- MR. OGLESBY: I will pass, thank you.
- 22 CHAIRPERSON WEISENMILLER: Public Adviser?
- 23 MR. ROBERTS: Hi, I'm Blake Roberts, Assistant
- 24 Public Adviser, we have nothing to report.
- 25 CHAIRPERSON WEISENMILLER: Well, certainly,

- 1 welcome to the Energy Commission, we appreciate your
- 2 contribution here.
- 3 COMMISSIONER PETERMAN: Yes, welcome, nice to see
- 4 you.
- 5 CHAIRPERSON WEISENMILLER: Yeah.
- 6 Okay, we have public comment, I believe. I don't
- 7 know if anyone in the room, but I think Eileen Anderson's
- 8 on the line.
- 9 MS. ANDERSON: Yes, can you hear me?
- 10 CHAIRPERSON WEISENMILLER: Yes.
- 11 MS. ANDERSON: Okay, I think the audio is sort of
- 12 breaking up on my end, so I'm hoping that you can hear me
- 13 more clearly than I can hear you.
- 14 COMMISSIONER PETERMAN: We can hear you fine, Ms.
- 15 Anderson.
- MS. ANDERSON: I'm sorry?
- 17 COMMISSIONER PETERMAN: I said we can hear you
- 18 perfectly fine, Ms. Anderson.
- 19 MS. ANDERSON: Okay, thank you. I just wanted to
- 20 thank the Commission for the opportunity to speak this
- 21 morning and to introduce myself. My name's Eileen Anderson
- 22 and I'm with the Center for Biological Diversity.
- 23 And we're currently an intervener on two proposed
- 24 projects that are in front of the Commission right now, and
- 25 we've intervened on a number of projects previously, where

- 1 we hoped that we would improve the project by decreasing
- 2 environmental impacts.
- 3 But today I want to speak to some troubling
- 4 scenarios regarding public notice and accessibility to key
- 5 meetings between the project proponent and CEC staff.
- 6 For example, I was in a workshop this last Monday
- 7 for the Rio Mesa project and there was a discussion on
- 8 water issues that highlighted the fact that the staff and
- 9 the project proponent had met and come to some sort of a
- 10 consensus on the modeling techniques with regards to
- 11 looking at the water impacts.
- We didn't know anything about this meeting. And
- 13 while, certainly, our expertise is not specifically in
- 14 water modeling, we oftentimes retain experts to look at
- 15 water resource impact because they're of significant
- 16 concern to the Center because of the wildlife issue.
- 17 And so at that point, you know, we believe that
- 18 this is in violation of the California Code of Regulations,
- 19 Title 20, Section 1710 that explicitly states that
- 20 discussions between staff and any other party to modify the
- 21 staff's position, or recommendations regarding substantive
- 22 issues shall be noticed.
- 23 And then in addition, yesterday afternoon I was
- 24 invited as an intervener to a meeting tomorrow on a
- 25 methodology that the CEC staff used to estimate bird

- 1 mortality that was originally scheduled only between the
- 2 project proponent and the CEC staff.
- 3 So, while I rearranged my schedule to accommodate
- 4 this critical meeting to us, I also know that there are a
- 5 number of interested public members that are not
- 6 interveners, that would also be interested in the
- 7 information and the discussion.
- 8 But, of course, it isn't a publicly noticed
- 9 meeting and so we believe that this meeting also is in
- 10 violation of Section 1710.
- 11 So, this morning the Center for Biological
- 12 Diversity just wanted to share our concerns about this
- 13 matter with the Commission so that you can be aware of the
- 14 situation and potential violation of the regulations.
- 15 But, more importantly, urge the CEC to truly
- 16 allow for a full public process on these controversial
- 17 projects.
- 18 We believe that a rigorous, unrushed project
- 19 review benefits the project by making it the best it can
- 20 be.
- 21 Thank you very much for your time.
- CHAIRPERSON WEISENMILLER: Thank you. I will, as
- 23 I did the last, remind people the Warren-Alquist Act, which
- 24 was obviously a combination of Charlie Warren, who
- 25 obviously did much of the California legacy in the 70's on

- 1 environmental protection and public participation, and Al
- 2 Alquist who definitely wanted a one-stop, expeditioning
- 3 process, basically calls for a year-long process. And
- 4 that's a metric that we always try to look at as we try to
- 5 balance what's written in the Warren-Alquist Act to
- 6 encourage environmental protection, certainly to encourage
- 7 public participation, and also to encourage a timely
- 8 decision.
- 9 But certainly appreciate your concerns.
- 10 COMMISSIONER PETERMAN: Yes, Ms. Anderson, as
- 11 lead Commissioner on the Rio Mesa case, I appreciate your
- 12 comments. And, also, I think you're just commenting on the
- 13 public participation process and, indeed, we strive to have
- 14 all the parties included in the appropriate forums and
- 15 meetings.
- And so I will ask that legal staff work with the
- 17 Public Adviser on investigating the concerns you raised and
- 18 making sure it's clearly understood by all the parties and
- 19 the cases the noticing -- the various noticing
- 20 requirements, as well as the forums for participation.
- 21 And so we'll take your comments seriously.
- 22 COMMISSIONER DOUGLAS: Yes, this is Commissioner
- 23 Douglas. I just want to add that, you know, of course this
- 24 is a concern you can raise with a hearing officer for
- 25 committees where it arises. And staff is able to talk to

- 1 applicants to exchange certain kinds of information and
- 2 request certain kinds of information.
- 3 So, it's not as if communication is not allowed,
- 4 it's certain types of communications leading towards
- 5 certain types of decisions, or influencing positions that
- 6 raise a concern.
- 7 And so that's what you are telling us that you
- 8 think has happened and it's certainly something that you
- 9 can raise with hearing officers or the appropriate
- 10 committees.
- But at the same time, as you know and as I think
- 12 you acknowledged, we do not have a policy that prohibits
- 13 communication between staff and the applicant, it's really
- 14 certain types of communications are completely permitted
- 15 and other types are not.
- MR. WARD: I'll make sure that the appropriate
- 17 legal staff --
- MS. ANDERSON: Yes, thank you.
- 19 MR. WARD: I'll make sure that the appropriate
- 20 legal staff are notified to start looking into this
- 21 situation.
- 22 CHAIRPERSON WEISENMILLER: Thank you.
- 23 Any other public comment?
- MS. ANDERSON: Thank you very much.
- 25 CHAIRPERSON WEISENMILLER: This meeting is

1	adjourned.									
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